

<110> Fisher, Dane K.
 Lalgudi, Raghunath V.
 <120> Nucleic Acid Sequences from Cyanidium caldarium and Uses thereof
 <130> 38-21(15749)B
 <150> 60/128,439
 <151> 1999-04-06
 <160> 5674
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 cgtctagaag aaagcagagg aaagcatact ttcaagcacc atcttctgta cgacgaatac 180
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 ttcgaaaaga agacgaagta atcatagtgc gcggagcttt caagggtaga gaaggaaaag 300
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gcaatgccaa aattgaggcg ttggaaagtg aactaaagca actgaaaggg gaaattccag 180
cttctacagg tgatccagtt caagattggg tgaatcaatt ggaataagat gtatatgtta 240
caagtgcctt gtggaagaga gagatagtca tttgaataaa attagttctt ttcccaacaa 300
aaaaaaaaac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa 360
aaagaaagag ctgaaaaaaa aaattagagt aaaaaaaaaa aaaaaaaggg ggg 413

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tctttgttgt tacctggcga ttatggttat tcttgtgaaa atgcactctt gctatatcat 300
acgcatgtgc tgccattgaa aaaggagttt tttgctcaac tgtatcaaata acaagaccac 360
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<211> 271
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271

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<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-B3

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cgagtcacgg ccccgctgca gagcttgaag tgctctcacc ccctgagttg tgtatcttat 180
ggaagagatg actcagaaat cataacatca gactatagtg gttcggcaag gatatggaat 240
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tttcttcacg atacagcccg ctactatattt attatgtttg gaagctctgg atacgtatac 360
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cacgggaaat cta 433

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<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-B5

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aggactcgtt tcacgaagaa gaagtcaacg aatacgagag tttccgaacc cgttactaga 180
tgaagagttt gccgaaagtg ttcgctcgga cgaaattggt cgctatttcc tggaaagagt 240
tgtaatggaa gagttttcttt tagtagatga aacgggcaag tcttttggtc cccctttaac 300
actaaaccgg gacaatgtgg agactgtata tcctgaggtg tcctttgaac gtcactctcg 360
ttgtggtaag ggagagagta gtacacctga agtggtgttt tgtagtatat gtctagacga 420
aattaattcg cagaatgttg t 441

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 <211> 424
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-001-Q1-E1-B6

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 atgacgcatt tcacaaagaa gaatcatcga agtatagagt ttcttgacac gtcagtagat 180
 ttatagtttg ctgacagtgt tcgatcggag gatattgggc gctatttcct gcaaagagtt 240
 gtaatggtag agtttctttt agtatatgaa acgggcaagt cgtttggtcc cctttaaca 300
 ctaaaccggg acaatgtgga gactgtatat cctgaggtgt ccttgaaacg tcattctcgt 360
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 atta 424

<210> 11
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-001-Q1-E1-B8

 <400> 11

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 atttattatt ttacgtgacg aaaagaaacc attagatgcg aaagctcttg ctgaacgcgc 180
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 atatcgtaat atgaagagaa agaaggaaca ttctgcattt tataaagtca ataatgggga 300
 attcggctca aaaatttggc ttcgtgagga agccaatgcc aagatggagg acggagaaac 360
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<210> 12
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<212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
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 cgggtgcaaac aaacgcagca cgaacaatat ggaaaccttt attatcaacg tatcaacaga 180
 gactttattc cggaatgtcc gttgatattc ggtgggtcac ttacaaaaac cgaaagtcgt 240
 acatttcaag tatactaagt ttcaagtctt cctattccac acaaggagga gacacggagg 300
 gcaagatacc tcattctaaa gatatgaaag gagaacctca gtccgcttca gatgcttacg 360
 acaagacttg ggctaaagaa aacttcanag acatttctg 399

<210> 13
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-001-Q1-E1-C1

 <400> 13

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 gacccaaatt aaggtgagag aatggacgat aaggaactag gcaaaaggat atggtatctg 180
 cggtagaaca tatgaaagaa gcagcaccga ctgttttagca aaaacacagc actctgcaga 240
 aaagagaaaa tgtaaagtat agagtgtgcg gcctgccaaa tagtagagaa gaaatcgatg 300
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 gcactgtcta gtcgtccaac tcagcgaaac agca 454

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 <211> 354
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C10

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ctccaacaac ggcacatata actaatatag tttattggcg tgttttggaa aaaaatgttg 180
ggaactaatt taccgcagga aaaagaactc gacaggagct tttgtcgaat gatgttcgtg 240
taattcaaca cgatatagct gcaggctctt cagatatata agttgtcgaa acactattga 300
tacctcccaa tgtgcatatt tcaaaacaaa agtttcgtct cctagttgtg aggt 354

<210> 15

<211> 386

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C11

<400> 15

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aacgtacgag aaagccaagt gaggaaaaga aggcaagtag agggcgggcc gagaaaggag 300
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<210> 16

<211> 407

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C12

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tttaaagtgc ataaaatcaa tttaatcaaa ctataactaa ttagaataaa atgaaaaata 180
aacttaaaac tttacgtgca gcttttaaga gatttactat aacaggaaat aaaaaaatat 240
tacattataa agttggaaaa aatcatctac taagtaaaaa gaataaaaaa agaaaaagac 300
atztatctgt taaagtaata attaatgaat atattaaaaa agcacaatt aataaattat 360
tgccatatat ttaaatatat ggagatgaat aaatataaaa ataatat 407

<210> 17
<211> 407
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-001-Q1-E1-C2
<400> 17

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atccttaaat tgtcgttgag gaaaacatgg cgacatttac ggcacgcctc aagcagctct 180
ggaatcatcc agcgggacct aaaacagtgt ttttttgggc tectaccatg aaatgggctt 240
tgggtggtgc aggcctgtcc gatatgaagc gccccctga gaaactttcc gtacctcaaa 300
acctagcttt ggcttgact ggagttatct gggttcgata tagttttgta ataacaccag 360
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<210> 18
<211> 417
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-001-Q1-E1-C5
<400> 18

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ccttgagata tgccataaat acggaataga agctatctac tacaactatg ccgagctccc 180
agaccaaagc cagcttcaga atgatatgat tactgatttg gagaatagag gtgttcaagt 240
caaaggtttt tggagcaata ctctgtctc tccagagcag atggaaaaca taaaagcttc 300

agatattgga tttaggaagt tttcacagga agcgaagaat gtgaagactt ctgaacctct 360
tcgtactcca gacaagttac ctctgtgtcc tgaagacatt ccaacgagaa tggtaga 417

<210> 19
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
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<400> 19

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gtctttgaac acggcaatac cgatttggga gtagtattag acactatgta cgagcgtcgc 120
tcaaagctag aattatgtca agtgaagagt attttatatc aaatcttaga aggtctagta 180
tatcttcatg atagctggat aatgcatcga gacttgaaaa tgtcgaacat tttatacaat 240
cgagatgggtc aagtgaagat tgccgatttt ggtttaacaa gagaatatac ttcaccattg 300
aagcctttta ccccaaaagt agtaacttta tggtagcgtg caccgaatt gcttcgttgt 360
gatcaaaatt tacacaagat ttcattatt 388

<210> 20
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C8

<400> 20

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gaaataccca aagatgctgt caagttttca ttgaaacctt ttgccactca cctcatcgaa 180
gctccagaac ccgtagctta tgctacgaaa gaacagttac tggcatatca tcgcacgatg 240
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ggtttttgct atttgtacga tggtaagaa gcaacagctg taggcattga atcagcgatt 360
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gatactccc 429

<210> 21
 <211> 380
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C9

<400> 21

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 <211> 342
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D1

<400> 22

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atctcaaagt aaccaactaa aaagttgcct ccatggagac ccacgctcac tcttgacaga 180
ttcctttaac gaaacttccc ggtttacaga acaaggcaga ttcctcttct aaaaaggagt 240
ttttgcctgc acggtcaact tttgaaacaa cctgtttcct gagtatatttg gaaactgaca 300
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<210> 23
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D10

<400> 23

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cgatgaacgc aatgcaaact ttctgagtat caagtggaag atatgcaaag tatagcgaac 180
gaatatcaaa cgctgtttta ttactttcta gtatcaaact cacgaaaagg tgccacgcga 240
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ttggaaataa agatattcaa aggaacattg tgcattatta acagaaaacc ttgtccagtt 360
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<210> 24

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D11

<400> 24

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accaacctcg ttacttttta tgggtagttg ttttgaatat attataccat tttgctagcg 180
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tgttggctct tttctttgtc gatcgtctta cttggaaaca ttgtgagtcg gtttcgtctg 360
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<210> 25

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D12

<400> 25

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acaagtttgg agggtcacatct ggagcaaatt cagagaatgt taaatagtcg aaagagtacc 180
 agtagtcata gtcgacgtag tatttctgat gacttgcttg gtctctttgc ctttcatgtg 240
 aattctatta tcgagagaat cggtagaaaa acgatatccg atgaaagata tcaaaaagat 300
 caagttgctg tgccaagcac tcagtcagca gcagtttcca aatcgggtcca aaaagctgca 360
 gaagagagtc aaaggttttc caac 384

<210> 26
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-001-Q1-E1-D4

<400> 26

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 tttccacgaa ttggctcttt taacggaagg atattcgggg tccgatattg ctatttttagt 180
 tcgtgatgca attatgcagc ctgtacgtac ctgtcagaat gctcaagcgt ttaagaaagt 240
 gaagaggccg aagagtgtga cggacaaaac attaaagata ttctatacac cctgtagtcc 300
 aggtgatcct gaagccgaat ctttgtctct tatggacatc aaggccgatg atcttttggt 360
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<210> 27
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-D5

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 tagtttcaga ggagagatgg ggatatgctc agcaaaccga acaacagcaa cagtgtccaac 180

aagtatgtaa acagtatgca tactatcaga gtccagtctg cacttccgta accacacaga 240
 gcccatactg gaccaatgc tcgaagactg tgcaaacctt tgtcccaagc cagtgcagta 300
 cttataccca atctcctaca tggacctatt gcagcaccta caccaccact agcgtacat 360
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<210> 28
 <211> 344
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-D6
 <400> 28

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 attcttatat gaagcagtcg atagatatga cgttggaatg taccaatagc cattcgaaga 180
 atcctccaaa gacgatgac aatggagcgg gtgttgggac gaccgtttcg tttcatcccg 240
 agtctattgt ccatcaggac catagttgat aggaaggaga gccattgtat tgtggtgagg 300
 tgctgatata tatatataaa acatacacat acacacattc atag 344

<210> 29
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
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 <400> 29

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 caaacccaac aacagcaaca gtgccaacaa gtatgtaaag agtatgcata ctatcagagt 180
 ccagtctgca cttccgtaac cacacagagc ccatactgga cccaatgctc gaagactgtg 240
 caaacctttg tccaagcca gtgcagtact tatacccaat ctctacatg gacctattgc 300
 agcacctaca ccaccactag cgtaccatct caatgcagca aggccgtgac tacctatact 360

caaacctgct gtgcttatgc ccaacanact tcctatgcag tcagtaccga gcaatatgtt 420
caggaaac 428

<210> 30
<211> 388
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E1

<400> 30

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agtgagtgtc acatgcattc atgtaaactc atcggctaata tcaaacgggtg tcgtggactg 120
gtagacatga ctccacacat tgctctagta tagggtaaaa tgtcaccaca cagtgggaagt 180
caaatacagga atctgatcat gtaggaaacg acattgcgac tgagatagag cctacaccta 240
aaatatcacc aatggcgaca tgtgggcaat gtacatggat ctgatagcca gtacacaaga 300
gtgttgtaaa caggaaacgc atcttgagga gggaatgaac gtaagttatt gcataagcac 360
atgctcgcga taacggtaga acgtgtgt 388

<210> 31
<211> 384
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E10

<400> 31

tcaatttgga ggacttgaag aatgccattc gtccagatac tggtcttgta tccgtaatga 60
tggtgaataa cgaaattgga gttattcagc caatcgaaga gattggaaag atttgtcggg 120
aacataaagt attctttcat acggacgctg ctccaggcagt aggaaagatt cctgttgatg 180
tgagagaaaat gcatatcgat cttatgtcta tatcaggaca taaaatttat ggaccgaaag 240
gaataggcgc cttatatgtg cgtagaaagc ctctgtgttcg tttggagcca attatcaatg 300
gcggagggtca agaacgaggc ctaagaagtg gaacacttcc agcacctttg gtggttgga 360
tggtgctggc aagtgaagtt tgta 384

<210> 32
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-001-Q1-E1-E11

<400> 32

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ctcgaggaga aaggagaccc aaattaaggt gagagaatgg acgataagga actaggcaaa 180
aggatatggt atctgcggta gaacatatga aagaagcagc accgactgtt tagcaaaaac 240
acagcactct gcagaaaaga gaaaatgtaa agtatagagt gtgcggcctg ccaaatagta 300
gagaagacat cgatgaaagt gaaagcgagt aaaagatgag gtatagagaa tggcggtcct 360
aacggttaagg atccanaggt agcgaagtaa atagacgttt gaa 403
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<210> 33
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E12

<400> 33

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aaaactcatc agtggatgat tgtttcaacc tctgcgaaaa ctggcaatgc atctcctgct 60
acacagtgtc atacttcgca cacttcctat cagaaccttg taaaggaagt agaaaagaaa 120
tgagcacag gaatgcgtat tgttttgtta agtttctactg caggaatgtg gactgcagta 180
ttgaatcaga agagcactgg ctatcaagag caagctttac attattgccc aggagctgac 240
tttccacgag aatgggttcg acagaaatgg gatgaaggct tttttattac tgccttggca 300
ggtaatgcca cgtcatgggg tggtgtttgt tccactatga cacgtaacaa gcgatacaaa 360
cagcaaagtt atatcgtttc tccaacattt ccttctaaat gggtagctga 410
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<210> 34
 <211> 437
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E6

<400> 34

caagaagagt catcgaatag cccccacaat ggatgcaact tgtatgggtc gagtatccac 60
agatatggaa tgtgggttatg gtcggttg tagtttatat tttcaatgga acaaggaggc 120
ggatcatggaa cgaggatgga ttgcacatat aattgcagaa acagatattt ggataaccaa 180
agatatattt cattgcagat attggctgag aacgaggacg cttgaacaag caaggttggt 240
tggcattggc tttgtgacgg ctgggaacgg aacagaacaa gtggccattc caagaaatat 300
attctctccc aatgtgataa atatgttttc tgatacattt cgatggattc cttgtgtagc 360
gagtcagaaa gtatgcacca gagaacaagg tggggatgg ttggagacga gtctggagtt 420
ggataaagag gattggg 437

<210> 35

<211> 330

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E7

<400> 35

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ctacgaatgg aattagccca gaatctaaga tgaagtatca atgtacaaag gagatagtgt 120
aggatgacatc gagaggggtat gcttagaagc aactgtctag agaggaactt gttcatacat 180
tcacaaatag agatccgtga aacaatagaa tgaggtaaga aatacgatcg tatcacgcta 240
atgatgtata atagcatgaa gataagacag aatgctgggt ggagtagtta ctcatgacaa 300
gggatttaaa cagtcagaat gaggaatggt 330

<210> 36

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E8

<400> 36

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ccatacagtt cttgcggtgc tctgtggtct ttttgttact ttttttatca caaaaatatg 120
 aaaaagattc tgttgtttgc gtgtacgctg tccacccgtc ttgcggacga ttcggagagc 180
 gtcaacagta tggatgaaga agactttggc aaagaaagtt ccggattgga agctcctttt 240
 gctatgtttg agacagtcac ctaaattggt tatggtgact tgtatatagt agtttgtgag 300
 ttatcgtaac acattgggtta aaaaatgaag tgttttacta tttgtttacc acgt 354

<210> 37
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E9

<400> 37

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 gggaacttgt gacagtagaa gagggccaag aatatgcgca agtgactcgc atgttgggaa 120
 acggacggtg tgaagcttta tgtttcgacg gtactcgaag gctatgccat atgcgatgga 180
 agatgagaaa gaacgttttg attaatgccg gagatactgt ttttaattggc ttgagagact 240
 atcaagacga gcaaaccgat catatactag agtataatcc acatgaagtt agagcattga 300
 agtctcacgg agatcttcta gacaccacga aaatcaacga acaagagggt gaagaacgag 360
 aggacattac gtgtgaattc gatgatgtac atgcagtata atatccatat ttcttg 416

<210> 38
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F12

<400> 38

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 aagaagagag tgtaaggcgg cgtcataata gaaatccgaa aggagtagaa gaaaagagag 180
 agaagaaaga aaagaagaga aaagccgtac tgaagaccga cacaggtact cgaggagaaa 240
 ggagaccaa attaaggtga gagaatggac gataaggaac taggcaaaag gatatggtat 300

ctgcggtaga acatatgaaa gaagcagcac cgactgttta gcaaaaacac agcactctgc 360
 agaaaagaga aaatgtaaag tatagagtgt gcggcctgcc aaat 404

<210> 39
 <211> 327
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-F2
 <400> 39

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 aacatgctct tagaagatat ccatccggag aggaacgctg tatagcttgc aagttatgct 120
 aggcaatttg tccagctcag gcaataacta tcgaagcgga acctctgcct gatgggttcaa 180
 gaagaaccac aagatatgat attgatatga caaagtgcac atattgtggt atgtgccaaag 240
 aagcttgctc tgtggatgcc atcgtagaag gtcacaattt tgagtatgca acagaaacgc 300
 acgaagagtt gctgtataat aaggaaa 327

<210> 40
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-001-Q1-E1-F8
 <400> 40

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 gaaccaagtg gataatgcaa cccgcaagct ggaaaagtta ttatatgcac atcaaggcac 120
 gtacaagatt ctcgaaagta gaacgttggg aagggcgata gagtttatgg tcgaactttc 180
 cactgcagaa cgaactgcta gtgtttcttcg ttctttggaa cataagaaac ccacagtggg 240
 tgctcatcca attgcgacaa gtggctcgtc ctgattattg ttgttattgt catcatcatc 300
 atccacacca canaaagaaa tgcaaagttg tgttctttct ggccaactca ccaaaaaacg 360
 caaatccaac tatgcggagc catgccaaag ttgggtggtg tagttgtcat ctttttttgg 420
 aaacacaacc aac 433

<210> 41
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F9

<400> 41

attgtacctt gcttgacccc tgagaaatac tctcttttga aatattgtat tgttttgttg 60
 tccttggttt tgactccaat acttgtaaga ggtattcagt gtcttttcta tcccaaattg 120
 atttgttctc gtcttcgtac tttgcgatac gaaccgaaag agctactact aactagtgtc 180
 ttgttattcg ttcttttgat tctgaatgtc gttttcctta taagaatggg aagtaatgcg 240
 atgcacaagg cagatgcaac catttctttg gaagcgaatg gattgaatcc tcctttacgg 300
 gtaatgactt ataacatata aatgggattt gatcgaagag gggaaatgaa ctgggaagaa 360
 ttggtggata tcatcaaggc cgaagattcg gatatttttag gtcttcaaga 410

<210> 42
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G1

<400> 42

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 aataggagta ataattggaag gaagaatgca ctcaagaata cgcacgataa taatgatgtt 120
 aataagaata ttattgagta gagaaatgaa tgaggtaata aatgtgattg taaatgtgag 180
 tgtaatttag agtggagtaa agagtaagaa gaatatgatg aaggatgtga tgaagggaga 240
 gatagagata gaggagtgga ttgagaaatg gattgagata gagatggtag aggtgatagc 300
 atgtatagta gccatttggg gcaactacta gtgcaatctc tattgataac gctgattaaa 360
 aggagggaaa tatggatgga tatcatgata atttacata 399

<210> 43
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G12

<400> 43

ctaatagatg tgcttcctcg ggaggggaaag gtaaacagag ccattgtgga tacgcaacac 60

gactgggttg taaatattgt ggaacaatac gatatttcta tggaagatat tcgaaatgga 120

ctttacactg gaaatgaatt gacttcgatg aacatatttg cttttcgacc tgacatattt 180

ggttttatgg aaaacaaggt tggctctgtt ggtttttgga aatggaagaa acattttgaa 240

tatcaagagc cgatctttgt gactagttga agcgttggtt ggaacagaat cctcatgaac 300

caagcaagga atatatattg tccactatgt tgaacgattt gtatgcagaa actggaaagc 360

gaacccgagt gtttgaaaca agaaatgttc ctttagaatt gaccaat 407

<210> 44

<211> 149

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G2

<400> 44

gacaaatggg ggaatgaagg ctcaagcggg aacaattgct acaatcacag aagtggacgt 60

ccaatattct ccagtctaca gcgttgggta tggcgatgga gtttatggtc tatctttcca 120

ctgcagaacg aagtgacggt gttcttcat 149

<210> 45

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G3

<400> 45

caaagagaga tcgtttgggt gccgactttt gtatgaacga caacaacagc actatacaag 60

tatggtttac tgcaactcaac ggaacttgca agatagttat actcacagct gtgggattct 120

acttggcgta caggggcaga ctgaacaagg aaatgtccaa aaatattagt agcattattt 180

ttgagatttt acttccttgt ctcttatttt cctctatttt acgtactttg gtgaatgtgg 240

gcttatatgc cctgtggtag attccactta tggccctggt atatcttttg atgggttggg 300

tattgggtca gttggtatgt aaatggacaa aaccgccacc tttttttaga atggcatgta 360

tcgtaacttg tgctcttgga aactccaatc ag

392

<210> 46
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-001-Q1-E1-G6

<400> 46

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gagaccgaca atattaacaa agttaatgcg gaagcaatcg cagcaatcga gaaattggag 120
caccgacact aaactgtcat ttgaaagcgg taaaactat caaatgatg gaaatcttgc 180
aacatccaaa cacagtcaag gcgttggtcg cttgagtgtg agaggcgacg cccaagtgc 240
cgcgctcttct ctatcgagat tcaaacgcca agcagatgat gagttacaaa catcaacaaa 300
tactttgaaa cgtagtagga aatccttgag gttggatgag accggatgaa ccttagtctt 360
ttgagggaaac tttggttggt gtaacaataa gatgttggtg tgaacctttc gcagttgata 420
ngaaaatgtc gagttgtagt ttccttccc 449

<210> 47
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G8

<400> 47

aattcgagca acgatcacgc taaaaggac cgattgacga tgcggttttc tctataacct 60
tgatttttgc tcagtatttt tgggccaatc aattatattt gttgtgcacc ttagctctc 120
gtatgattat ttggtgcagc ggtacatttt ttggctgttt caatggaggc aagcttcata 180
agtgcagtct gttttaaatg tttttcgaaa acggtttcta gtgtttgtca taggcggagc 240
actctgcgtg gcttagaacc agttacggct acgagtacta tactcgaaag agatccacaa 300
cgaataaaga actgtttcta tttacctgtt tcaatgaaac tttcgatga cgccacaaa 360
ctacttggtg tgacgggaaa taatcgtgta ggtttgagtg actttactgt attatgaaga 420

ttcacccggtt tttttgggta ggaactca

448

<210> 48
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-G9

<400> 48

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atcatggcgt tgggttttat tggagctgga accaatcatg ccagaattgc tgccttggtg 120
cgacaacttt ctgcctttta tgcaaaagat tcttctggac tgtttgcagt tcgaatagca 180
caaggcattc ttcatatggg aaaaggattg ataacgctat ctcccatgga caatgagcgt 240
ttttcgatat atccaaatgc tttttgtggt ttgtttacta ttatctatct gtgctgcgtt 300
tcacaacaca cgcttttgaa taagcatcac tatttgttat atttgttatt gttggcagct 360
cgtcctcgaa tgttgtacac agtcgatgag gaaatgaagc ctttg 405

<210> 49
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H10

<400> 49

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ggcactcttt ccaagaaaag atatagaagg gagaagaaac attcgagttg tgaacagaca 120
gaaacactgt actttttgta agaattgcag gtggaaacga ttctctgtca ctttaatgag 180
catggagaat aacaatagac agcaaaactac cgttcactc acgactcttg aaaccaacag 240
agtaccagag agttctaaaa acaaactttt ttatgtcaag tttcaaaaca taccgaagtc 300
tttaaaagat atggagtttt tgactttttaa gtggttaagag cagtgtcat ggctcctctc 360
taatctcagt tttctggaag gaaaggaaag tacaatatca actatcttg 409

<210> 50
<211> 413
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-001-Q1-E1-H11

<400> 50

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gggaaaattg tgggtggcgc gtgaaaacca tgggtggcgc ttctccttct cgcaagttgg 120

aaatacaatg tggagtattg aaaaggtatc ctagattctt tgtggatgag tgtgcaacta 180

agaaaccagg aaagaacgtt gaaagatata tccgcttata aaaaggagtt taccgagatg 240

aaggagcana tacaacgggc aacacccgat taaccatata agcaatggca aaaagtgttg 300

gaagaaacgg agagaatggt atcggactcg tataggaggt tatcggaagc ggtagacagt 360

ttacaaaagt tgcaaacgca gatggaaaat ttgcgaggga acaaagaatg gga 413

<210> 51

<211> 438

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-001-Q1-E1-H2

<400> 51

tccggctgac cncacgcgtc aactattcgg caaacatttc ggctaattgg taggcacct 60

tccaattctt ctggaaagga tttttacata attccggtac cagttaaggg aatcacaatt 120

tggcgctcgt ggaactattg tgagtaatca cgggtgctagg caattggtca gctctccagc 180

aacgatcgat tgttttagact ctgttgtaga aggcgttcgg ggtaaaatac ccgttttatt 240

agattccgga gttcgtcgcg gaacagatat tattaaggct ttagctttac gtgcacaagg 300

agtgtgtggt ggtaggccga tattatgggg actctcagtt gcaagcgatg tatgcgtcag 360

gcgagttata gagctgtttc gcagtgaatt cgacctcgac atgggaacttc ttggttgctc 420

atctaataca gatatccg 438

<210> 52

<211> 419

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H3

<400> 52

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tgcaacaagg aaaagatttc aagtacacag ggaaagggtg caagtgttgt aagtatcctg 120
tacgaagggg ttgtacaagt cgtccttccg ttgcgggggt cggctcttgtt tctcgtctag 180
aagggaaaaa cgacttggtg gagcggttcg atgccagttc aaagtatttc aacaaaaaga 240
gaaacgacag agaaccagat ttttatgcga acttgggaaac agttatcgaa actttgagaa 300
gcgactatgc tcacattctg gagaaggaaa ttgacctttc ggtttatgac gacaacttaa 360
tattgcgaga ccgcatgcac ggtcaatact tacaaggga ggaagcgtac aaaacaata 419

<210> 53

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H5

<400> 53

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aggaaaaaac tgagtatcag gaagaaaaga gggagtagat gaggaagaa agatcaagga 120
agtaagagta agagaaggag taatgtgaat gaaagcagga aagtatttga agaagagagt 180
gtaaagcgcg taccttttgc aaaatgtccc aacgagtga agaggaagca aaaagaaaga 240
aaaagaagta gccaggtaag acccgaagct agttgatctt atgctgtcca agcgaagtaa 300
ggctgaacca gtatctgtgg aaaaagattt gggagaaatg gcataaaggg tgaaaaggca 360
atcaaagcta atgaaaactg ggactcctcg aaagctagaa ag 402

<210> 54

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H6

<400> 54

ccacgcgtcc gctctttggg aagcatgacg tctatttggg aggcattcaa acaactcctt 60

tatcattaca aaaacacagt tccttaccac ttaaagggtta tcgacgcttt tctcttgtat 120
gtcttttcta ctgctgccat ccagtttgtt tacgtcttgt tcggtgggac ctttcctttc 180
aacgctttct tggcggtttt cttctcgtgt gctggagttt ttgtgttgac aggtaaataa 240
tacagggata ctatatagct gcggtttttt ccctcacgtt atttatctag tggccttgcg 300
catgcaagtg aatccgcgga atcagaacgc agccaatcga tgggaaaaag tgaacccta 360
ccgtgcttat gtagaatggc tgttttgtaa cttgattttg catattgctg t 411

<210> 55
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-A1

<400> 55

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gctgatagat atgcgtctca agcagttccc acaaagactg tggaagggtt ggaaacaacc 120
gctgatttac gaaaaaagt gattgcgact catattaacg ctctccctgt tcgtttccaa 180
cgcgcaagag aagagttgaa ggattttgta caaaagactc gtacgttgga ctttacgtat 240
cttgatgcgt ttcgttttgg tttccgaagc ttagagttgg cggcatggta ctggatcgga 300
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cttttctcgg aaatacaagc ttttatgtgc tcgtgt 396

<210> 56
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-A10

<400> 56

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aggaagtaan aagagggaat gaagggaagt tatggcaaaa acacgtgcca gcagcagcgg 120
taaacgtgt gtagcaagcg tagagcagaa gaactgggtg taaaggtcga gtagtagagt 180
aagtgtaaaa gggaaaggaa aggagagaaa gaggaaaggg atgaaatgca gagatctcta 240

gagaaaggca agaaagaaaa gaaaggaaga cacagtaa at gaggcgagaa agcatangaa 300
 gtgaaacgga ttaagaaccc gtgtagtcta tgcagtaaaa gaaagaatga gtaagaaaaa 360
 agggagtc at tcccacagng gagtaaangc gcaagaaaga aacc 404

<210> 57
 <211> 314
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-A11
 <400> 57

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 tgggtgttca agttcgaaaa aaggaaactc ctaaagcggc tgcttggaag agaagttcat 120
 ttcattatca aaagatgtta cgagatgagg aaccgtggaa acaattgtat tatcatgtat 180
 ggaatgaaca caagtccaag tctgtagaca aagtttggga acaatttgca gttgctccta 240
 gtgaacaacc acaagagaac aatcaccttg tggaacagtg gatggatata gccgtttgga 300
 aagaagagaa taat 314

<210> 58
 <211> 125
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-A12
 <400> 58

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 gcacaagaac atctttttcca tttattttcaa gtttgaaaac aaaatatttc tcgactttac 120
 ccttg 125

<210> 59
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-A2
 <400> 59

cccacgcgtc cggatggaga aggacgagca tcatgcagtg gcaaggggaat tggctaatacg 60
 catgcgactc ggcacagtat ttacagttcc cgagagaaga ctttgctagt gaagaagaat 120
 ataataatta attagaagct tttgaagatg ctgtatatag tttgcgtgaa ggaaccaaca 180
 cagatgaagc ccaagcaagt atggagagac ttgcaaagta tatcacatac actattacat 240
 aacaaatact catgaatcca gttttgattg tggatgatga gagcgaagac aagaataatg 300
 agagtagcga acaacaagga gtgacctttg tagatcctgc aagaccagca aagcctatgc 360
 ctgctccttt acgagacaac agtcctgtgg atgacaagat gc 402

<210> 60
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-A3
 <400> 60

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 tgtaatacga ggccagagaa agggagccgg tagtatatct cgtgcgcatg tcgtcaaaag 120
 aaaaggagca gccaaagtta gagcgttga ttatgccgaa agacacggat atctaagagg 180
 agtcgtcagg gaaatcatac acgaccagg aagaggagct cctttggctc gagtgggaatt 240
 tagggatccg tatagatata agagaagagt agagactttt attgcaccag aaggtttata 300
 tacgggacaa ttcgtgtatt gtggaaagaa agcccaacta gcaatcggta acgtccttcc 360
 acttggttcc ttacctgaag gaacagtcgt ttgtaacgtc gaaggtaaaa ttggcgatag 420
 aggaaaaatg g 431

<210> 61
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-A6
 <400> 61

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 aaggattgga gcaatgccca tgcctagtgt agtcgttgtt tgcacagac aagtctagga 120

gaatcctcgt ctcagctgca tcaaccacag taatgtacga ataatgagat attttgtttg 180
tagttattgg actgcatcga aaaagaaaga tggcaaatgg aatattgcgt tgtcggttggc 240
agtaaaaggt aagagatgat tgcattcgta tgcatttggg gtcgagtgcg ttttggatcc 300
aacttcagct cctcatgacg aatatttata taaagctgag tcgttttcgac gacgcatata 360
gctctcttat gaatggttgcg gaatgtatag aa 392

<210> 62
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-A7

<400> 62

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aatatgggag tgccgttaac gagtgggtat gtatcagaga tgtggataat gtggggaata 180
atgagtgtga gtaaggagat aggagtaatg atgagtataa gtatgatatt aacggtagtg 240
tatacgatat ggatgtataa ccgagtatat aagggaataa ggaaggagta tataaagaag 300
gagatggaca taagtaggag ggagtataac agtataagtc cgttagtggg aataatgata 360
ataatgggag tgaagccaag tatatggagt gaag 394

<210> 63
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-A8

<400> 63

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ataggagtat gagaaagaag gaggagaagg aagaggaaag aaggagtata aggagagaag 120
taagtaatag gaagagggaa gtaaaggagg aggaggtaaa gatgaataaa agagagttat 180
ggtagtagga ggagtaatga tgccgataat aggagggata atagggttag gttatggaag 240
aaagatagga gtagaaggga gtagtaagat aaatataagg agtatgagat ggagtgtggg 300

gttgataagt atggagttat atgagagtgt aatagaggga gtaaagaagg aagtaaaaat 360
atgggagtg atgagggacg gagtagagag 390

<210> 64
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-A9

<400> 64

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agctttctgg tcaacaacgg cctctggttg ctctcgtttc tttatgtgta tttctcaggg 120
aatatttaga catagcaagg aaggagcttc aagaatccaa cgaatacgtg ttttatctac 180
aaaatgaaac caagtctatg aaagacgtag aaccagggga tttggctcaa cgctgtataa 240
agcagctaatt attgcagaaa gacaaaacttt attctctctt ggatgaattt ggtagaagat 300
ggcatcaaca cttgggtcaaa gaatttcctg angacgaatt tccttgggta gtaacaacan 360
aagaggagtc ttccatgttc actagggacg ggaaaa 396

<210> 65
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-B12

<400> 65

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accttctttg ggggcaacct tggctctcat tcaaagtata atcctgtgca attcatgcag 120
taacagccga tgaaataaca agtttcgaga gaggatacca nacagttgca ccaactcaga 180
cgcagcaatg tcaaaagatt tgtgtcaccg ccacacaaac tcaagttcaa agttgtat 240
atactcagac acaggctccg ttcatgtctc aatgtgtcac agcattgcca actacctgct 300
ataaatacgt aacaaaatat aagcaagtgt gctgtgagca agaatacagag caacagaatt 360
atcaacagca gcaggtttgt caacagtatt gccaaactatc ggtacagcag 410

<210> 66
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-B3

 <400> 66

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agagggaaac atgtcgaaga agcttctgga agactttatt gtaaaggggt agtggtgggt 60
tataaaaggt cacaacggaa tcaatatcct agtcaaacca gaatcaagat acagggagtt 120
gaagatcgag cttcgacagc gttttattta ggaaagcgtg tggcatatgt ttaccgtgca 180
aagagaccaa gaaagagtgt tggaggaaag aaaacaaaga ttcgagtgat ttggggaaga 240
attattgcac cacatggtaa tagaggagta gtacgtgcc agtttcgaaa caacttgcca 300
ccttctagtt ttggcaaacg agtaagagtt atgttgtatc caagcaacgt ataaacaagt 360
gctttaaaat tttaaaaacc aancaacgaa aa 392
  
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<210> 67
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-B4

 <400> 67

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agaattaact ccggaacgtt ccgatatnnt gctgcgggct tttgttgtat ttggttaaaa 60
aggtttccaa aaaaattgca acgggattcc ccgtaactgt aataatccaa gtatggtcac 120
gttaaaaagt tagctgacca gattgctgaa ggagttcgtc aaaaagatg tgaagttggt 180
gtataccagg caccagaaac actttctgaa gatgttttga aactattaaa ggcaccacca 240
aagccaagcg accctgtatt cacctttgac aagcacagcg ttttggctga agccgatgga 300
gttctatttg gctttcctac acgttttggt atgatgtgtg cacagatgaa agctgttttt 360
gactctttcg gacatctatg gcagagtgga gctttagcca ccaaaccggc 410
  
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<210> 68
 <211> 402

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-B8
 <400> 68
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 gctagcgtct ttgaaaagtt atgattggga tatttaccaa cgtatcgata acctggagtg 120
 gttgaatagt gagcaaaaga caatgtggaa agactgggttg gtagaattga aaacgagatg 180
 gaacgacgct ttggaacact atgtgagtcg catggtggaa gagttgaaac aacaacaccg 240
 attccgtaca gtaacggagg aagaaagaca ggcgttgatt cgtccaattg tacaagcatt 300
 tgaagatgct tggaagagaa ttcgcaagat gatggtagaa gatgggttga atagaatgag 360
 gagggagacg agagccagta agagggcact tgtcgagtgg tt 402

<210> 69
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-C1

<400> 69
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 agcggtaaaa cgtgtgtaca agccttnaac aaaagaactg ggttttaaag gccattata 120
 aaatatattg taaaggggaa aggaaaggag agaaagagga aagggatgaa atgcagagat 180
 ctctagagaa aggcaagaaa gaaaagaaag gaagacacag taaatgaggc gagaaagcat 240
 aggaagtgaa acggattagg aaccctgtga gtctatgcag taaaagaaag aatgagtaag 300
 aaaaaaggga gtcattccac caggggagta aaggcgcaag aaagaaaccc aaagcaattg 360
 acgggaatcg gaaaagggg tggatcacgt aaattaatc 399

<210> 70
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-C10

<400> 70

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ctactgaaat gattcaaata aggactgtat taaaagtact agacaactca ggacacaaaa 120
cagcaagatg tataggaatt cttggaccac ctaaaaagtt tgctactgtc ggtgacaaga 180
ttgtagttac tgcagaggga aaagtttacc acggaatcgt cgctgttgtt aaggtggaaa 240
agaagagacc ggacggttcc tttgtaagaa tcgaccagaa cggagtcatt ctagtagatt 300
caagtggaaa gccagtggga aacagagtat ttggtgtttt gagcagtaga gtgaagcaac 360
cggaaattct ctccttgnga cgcgttaaaa ccatgtaagc tttaatag 408

<210> 71

<211> 420

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-002-Q1-E1-C11

<400> 71

caaaccttcg ggaacaagaa aacggcggcc ttggtggatg gtacaaggct tttggctttc 60
aaaaccaaat tacggcaacc ctaaaaccaa tccccggaaa aagctaaaat tccagccaat 120
catatggaaa tgctggagcg tcgggttacg ccgatgtatt tccattatca acaaatttc 180
cagagattga agtagggagt gctgcctcct ctggagacgg ggggagagct cattcaacag 240
agtttgccac gtattcgcag ggctactcat atcaaactcc ggagtacttt cctgaatttg 300
tgcaaccttc gtctaataaa gactatgaat acgtcgcacc ttatgggaat ccggagtatt 360
attggaaccc ggagtattat tggaaccag aaggattata ctaccaagc actactaatg 420

<210> 72

<211> 416

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-002-Q1-E1-C12

<400> 72

agttactttt aaagatgttg ctggtttaga tgaagctaag gtggagatca tggagtttgt 60
cgatttcctg aagaaacctg agaaatatcg cagattagga gccaaacttc caaagggtgc 120

tttgttggtt ggtcctccag gtacgggaaa gacgttactt gccaaagcta ctgcaggaga 180
ggccagcggt ccattctttt ctacaagtgg ttcagacttt atagaaatgt ttgtgggagt 240
tggccaagt cgcataaggg atttatttgc acaagccaga gccaatgcgc cttgtattgt 300
atztatcgac gaaattgacg cagttggacg tgctcgaggc agaggtggct ttgctggagg 360
aatgatgaa agagaaaata cgctcaatgc tttgttggtc gaaatggatg gattta 416

<210> 73
<211> 180
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-C3
<400> 73

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acaagacaag ccacttgtga aaaatatgcc aaaaaaggca tcttgtggac aacgttggtc 120
gccttgatcg ttggactagt cacagacgat tacctgcgaa tggttcaagt atttaaattg 180

<210> 74
<211> 283
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-C4
<400> 74

ttgggtttct tttcttttgt atattttttt tataaaaaat tttctcttta atcactatca 60
taagtatagc tggatatgcca taatccgcac cttgtgggtca acgtatggct gcttgatcat 120
tggcctagtc acatatgatt atttgccaat ggttcaagta tttatattgg gaataatttt 180
tgtatctatg ggcttacttt tctctgac atgggtatata tgacatccac ttgtgtttgt 240
ccattcagca accaaaaatta tggattctaa cagccattct taa 283

<210> 75
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-C5

<400> 75

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ggaggttgga tgattctgca accactgccca ccaaacgtaa gagtagagta gatgtttctc 120
aaaatagact gcctttatcg gaaaccttat cacctaagga ttcttatgag gagtttccca 180
actggtttct agtagaaaaa caacgtctca gtgagctcga agagaaaatg aggttgtggt 240
tgttttcgat ttgttattgt ttggtttttt aacacttgtg tcaaaggac tcgacgattc 300
aggatgtgcc tgttctaaag gctttgatgg atacgaaaca taactgaatc atgtatcaat 360
atgaaaatgc taacttggac ttgatggaac gtatctatcg aatgaaaatg ccagagtcga 420
agaactttgg atgt 434

<210> 76

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-C6

<400> 76

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ttgcttttct tttctttcat gaatgagcat agactttgga cacacttgac gatttcaggt 120
ttggagcagg tgtagacct ttctcctcgt ttggattcc ctgtgttacc tgtgatcgtt 180
attttacaca cactaaagtc gtcaagggtgt tggtttcgaa actaaaaggc cttcgatccc 240
ctgcattatt ggtattctac aatggatgtc gaagttgctt cacttgcatt ctctttattg 300
ctcatggtgc agttatgttt gaaaagtcca aactctatat gcctcatgag ttggtttgcg 360
gctccgtac ccagcaagat ggccgcctcc atttt 395

<210> 77

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D1

<400> 77

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 tgtctcgaag attttaccgc aacgaggctt cggtagcgga aaggcaacag agtatgatgc 180
 acagcagtct ccacgtagtt gtctgttgag ctccacatga tcacttgctt ccaataatgc 240
 atcgctttca ataataggaa ccatttcata gtgttaataa atggaagcat agcatctcac 300
 caactctgca ttgacttgga tagcaagtga aggactatga tcattcaciaa tacgaaaagc 360
 tggtttccat ttggttaagtt ttgctccttg tttc 394

<210> 78
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-D10
 <400> 78

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 aagtgaagcc gttgattgac gactttcaac aacgcaagat ggatgatagt gagcacgtcg 180
 gagtcttcac gaatcgaatg agaaaaggaa gaatctcagt tccacctgaa acgactgaga 240
 atgccgaaaa cagttgttct gaccaagtaa ctaccgagat ggaagagtcg actgcagcac 300
 aaccgaagt tttggatgtg gataaggaag aaaacgagtt tactcaagac tttgatgagt 360
 tggaagaaga gaagaacaat gatgacggca gtgaatgtaa tgaagaggac tc 412

<210> 79
 <211> 397
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-D11
 <400> 79

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 gtgatttctc cccaagaatg gagcctaact tcacaaaaag cagtgccact gcaacaacaa 120
 caccggccac ctaccggagt agcaacacaa gcgcctcctg agccacctcc acctcctccg 180

ccaatcacca gtactcgagc tttagtgaca ccttcaggta ctttcacagt ataagaaccc 240
 ggttccgcaa aggaactgct caactcgaca ccagaatgtc ctcnctgagt tgcagaagag 300
 acatcagagt cattgtgaaa aagacgttcc aaccagtttt cttccaaata tccttgaaac 360
 tggacaatgt tactcccttg ctgggactcg tacaacc 397

<210> 80
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-D12
 <400> 80

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 gaagtaccct cggttggctc ctccaggaaa tcgtcgcaaa cctcctcgca tcgttcttga 180
 agaagatagt ttgtatgaag aactatacga gaacattcca caactacagt atactcctct 240
 gaacattggt cagtcacttt atggagacag gaacgtatgt gataagtttg tttattttca 300
 aaaattgtat atggatagca agggatgag taaaaaggag gcttttgaca cagtaagaaa 360
 ggaacttgat aaagaactgg aagaagcact tcgccagtcg tcctcactgt attggaatgg 420
 g 421

<210> 81
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-D2
 <400> 81

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 tgggaaccgt ccatgaagcg cttttatctg tttcaaacia tcaagaaatt ggtgtttata 120
 acgcttctct tatgttgttt ggccacggag atggaggagg tggaccact cctgccatgt 180
 tggagagtcc ttctcgatg cgagacttag caagcctacc ccaagtacat ctggatagga 240
 cacctacaca gttttttgaa gaaatgcaga agcaccaaga tgagctacca atctggtttg 300

gtgagttgta cttggaggat cacagaggaa ctttgacaag tcagtcgttt gtgaaacgaa 360
acaacagaag agcggaagag atgatgaagg aaattgaac 399

<210> 82
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D3

<400> 82

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ttcggttgga cgacttggtt gtggacagtt ttgagattcg cgacgtgaaa cctttacatg 120
gagaccatca ctctcgagct attggtagag ttgctggaag agatgggaga atgaagttaa 180
ctatagaaca tgcaacgaag acacgaatag tattgacgga tacaatggtg catatattag 240
gttcatacca aaatattcaa tttgcaaaga atgcagtagt cagtcgtatt ctaggttctc 300
cacctggaaa aatacacaat aagctgagaa ccgttgctgc tcgattgaac gagcgctttt 360
gaagccgacg aaatgtcgaa atgtattttg tcgcttg 397

<210> 83
<211> 340
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D4

<400> 83

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aaaaactgag tatcaggaag aaaagaggga gtagatgagg aaagaaagat caaggaagta 120
agagtaagag aaggagtaat gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa 180
agcgcgtagc ttttgcataa tgtcccagcg agtgaaagag gaagcaaaaa gaaagaaaaa 240
gaagtagcca ggtaagaccc gaagctagtt gatcttatgc tgtccaagcg aagtaaggct 300
gaaccagtat ctgtggaaaa agatttggaa gagatggcat 340

<210> 84
<211> 397

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-D5

 <400> 84

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 agccgtactg aagaccgaca caggtactcg aggagaaagg agacccaaat taaggtgaga 120
 gaatggacga taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga 180
 agcagcaccg actgttttagc aaaaacacag cactctgcag aaaagagaaa atgtaaagta 240
 tagagtgtgc ggcttgccaa atagtagaga agaaatcgat gaaagtgaaa gcgagtaaaa 300
 gatgaggtat agagaatggc ggtcctaact gtaaggatcc aaaggtagcg aagtaaatag 360
 acgtttgaaa ggcggtccagt atgaaaggag aaacgag 397

<210> 85
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-D7

<400> 85

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 tagaggggaat agatcgtaag atattggaag aatgtggaag gaaggggagt aaggagataa 120
 tggaggtaat ggagaaggga gtaagaagga ggggtaatgt gagtaagtat tcgatgggaa 180
 tgataatagg gataataatg tggggatgga gttgtggata ggaatgataa gtccatggaa 240
 aggagagaaa gaggaaggga atgaaatgca gagatctcta gagaaaggca agaaagaaaa 300
 gaaaggaaga cacagtaaata gaggcgagaa agcatangaa gtgaaacgga ttaagaaccc 360
 gtgtagtcta tgcagtaaaa gaaagaatga gtaagaaaaa 400

<210> 86
 <211> 359
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-D8

<400> 86

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tttccaagg gttcctgatt ggaaaccgc ctgcaagact tccaggtttt catacttgtg 120
tgggttcggg gggagaacgt ttaccaccag agtgggtatca agaacacggc attgatttgt 180
tgctttccaa tgcagttact agtgtcgatc cttctacaaa gaccttgaag ttgtcttcag 240
gagatacaat ttcgtacgat aagttggttg ttgcaacagg atgttcggca atgaagttta 300
gtgatcttgg tttccctggg gcagattatc aaggcattca ttatcttcgt aatatacac 359

<210> 87

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D9

<400> 87

acccacgcgt ccgagacgcg gttctttagt aacaatttta ggaaaagtag ctaccggagt 60
atggggtcaa aaagggacaa caagggtctg ttctctatga tatatcacgg gttgatgtct 120
gctctttttc tgcttgggtg tctaactctt gttgggtgtg gaatatatgc tgaagtaact 180
cattctggaa agtttgactt ggattggacg agtagctttt ggagtgtctgt gacgaacttt 240
ggaatagctg ccatcatagt tggagccacg ttggcagtta ttggagctat tggttttgta 300
gcatttaact ctggtttttg tgggaaattc ttcaagttga tgtatttcat tcttttagtt 360
gcagtattcc ttgttctact gtttatggcc atagttacgc ttatgttagc caacggagat 420
aatgt 425

<210> 88

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-002-Q1-E1-E11

<400> 88

aaccaagcct tcgacggaac cttgggttaa cttggacctt aatcctggta aacaatttcg 60
aacaaaatgg tgccctgggt aattgccatt ggtccgggtta tggtaaaacc aggatttgca 120

gggaacaatg ctccccgttc cgtcttcct tcaatcgtag gtcgnacaag acaccangct 180
 attatggttg gtatgggaca aaaggaaagt tatgtgggtg atgaggctca gtctcgaagg 240
 ggtatactct ctttaaaata cccaatagaa cacggtattg tctaataattg ggatgatatg 300
 gaaaagatat ggcaccatac tttctacaat gaacttcgaa ttgcacctga agagcatcca 360
 gtcttggtga ccgaagctcc tctcaatcca naggcacaaca nggagaaaat gactcagatc 420
 atg 423

<210> 89
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-E12
 <400> 89

attatgatgg acaagtagca agtcttccta cgctttactt atgaaaaagt cgacgagtgc 60
 tgtgacaggt agaagaactt gggacaaggc ttttttcgaa aagaaaagtg agcaacanaa 120
 gaaagaagaa gatgaatacg aaaagaacga aagagaacgc gccaaaaagg caaacagacc 180
 acaagaaaac gaccagttag cacctacgag gtcgtggctt gaaagaagag actatcagtt 240
 ggactttgaa aaacgagttg gaaaggctac agtggtttct tctctgagag ataaaaatag 300
 cgggtttttac tgtgaaatat gtaaagtgtt acaaaaagac tccaacgcat atttaaata 360
 cctcaatagt cgaatacatc agaagaactt gggcatgtct ttg 403

<210> 90
 <211> 300
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-E2
 <400> 90

agagagatcg cgtattgaat gctattcgaa agcatacagt tcctagtggg atgtttacag 60
 aggagattga tcgatatact ggtttcgagc aaggagctat caatttaact tggagttatg 120
 atgcctttgt tactgcgggtt tggtcgagag aagatgttca caagttgttt tctaaatatt 180

gtgaacctcc ttctccacct ctacctagta tgccaggacc tgggtggttta tcttctccat 240
aataagaggc acttgtgcac tttggatatt tttgtggttc acataaagac aagctttatt 300

<210> 91
<211> 263
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-E3

<400> 91

cccacgcgtc acgaaaaaaaa aactgaataa aacaacacca aatgtaaaac aatcaactcg 60
aaaaatcatt tgggtacaggt tgcattgaatg ggattgcggt cccatctgtg ctctatgata 120
ctgggctcga gcttacaagg tgtcgtctct tcaaggattt aaccggtgct ttccatcacg 180
gtctgacgct tttatcacat tccatcgctg gtatttccct ctttcgtag ccgattttat 240
tcgccttggtg ccatgatccc tcc 263

<210> 92
<211> 398
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-E5

<400> 92

agcaggatga gtgtcaggta tctccaaatt tgtgcaacgg cttcaagaag tcttttgtca 60
aaggaatcta aagggttttg ccgatatttg cacgctacga aagtctctca ggcgtctaata 120
gtgatgtgcc gagatgccct taacagtgcg cttgatgaag aacttgaacg agacgaaaga 180
gtttgtatta ttggagaaga agtaggacag taccaaggcg cctacaaagt tactcgtggc 240
ttgtatgaaa aatatgggtc aaggagaata gttgatactc ctatatccga gatgggtttc 300
accggttttg ctgtangagc tgcattcaac ggactaagac ctgtttgtga gtttatgacc 360
tttaactttg caatgcaggc gatcgaccag atcatcaa 398

<210> 93
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-E7

<400> 93

agcccacgcg tccgcgttga gtccaatcgt tgttgtgggt ttttggtaaa aaatgtctgc 60
tgaaccagtg ggaaagttaa actctggtgc aactattcct cttcgtggct ttggaacctg 120
gaaagctgag cctggagtgg ttggtgaatg tgtgaaaact gcttatgacg tcggttacag 180
acactttgac tgtgctgcta tatatcagaa tgaaaaggaa attggacaag ctttttcaga 240
acttttctcc agaggagtga agagatcaga catatttgct acttctaaag tgtggaatac 300
ctgccacgat cctcaaagag tggtcgaagc ttgtaaaca actctgcaag atttacgtct 360
ggattatcta gacctttact tggttcactg gccttg 396

<210> 94

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-F1

<400> 94

cccacgcgtc cgcacgcgcg tccgtgaaag taaaatcccg aaacactata ttgtctcacc 60
tcctcatatc gaaaggaccc ttggagaata tttggtgcat aatggatgct gacgtctctc 120
cataagttag actcagaaat ttggtcatgt tacctatttc ttcaacggaa atagagcaaa 180
caaatttgat gaggaactcg aactttatgt ggaagtcca agcagcagag aaagagaaaa 240
tactcgtcct tggatgaaag cagcagaaat taccgactct gctttggcag ccatagatga 300
gtttaaacct gatattgtag ttctaaacta tgcaaatgga gatatggtag gacatactgg 360
tgattataat gcagctgtta tcgcatgga agcagtgga 399

<210> 95

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-F11

<400> 95

cccacgcgtc cgcacgcgcg tccgcccacg cgccggggg cctaagcaaa aggacacaag 60

gaacttggag acttgcagat gtcattgtcg aagttttgta tcggtttctt taaacccgct 120
tccatcagag cagtggtcac ttacataat gccacgttca agcgcttact gcacgacaga 180
gcgtttctta tggaggaagc ttcaggtgga gcacagggcg ctacgttga ttcaaaggaa 240
gtcaccgata gagttctctc cgtagtaaag aagtttgaaa aggtggatcc tgccaaagtg 300
actccgcaat cccactttgt gaacgatttg ggactcgata gtttagatac agtagaactt 360
gtgatggctt ttgaagatga gtttgctata gaaattccag acgcggatgc ggataagatt 420
ctat 424

<210> 96
<211> 379
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-F12
<400> 96

cgaccacgcg tccaccaag cgtccgcgga cgcgtgggcg gacgcgtggg cggacgcgtg 60
ggttacgggt gagttgtggt gctgtctaaa gatgcgtttc cccctgtgaa ggtggtctat 120
ataagtcaac ttggaaactt taatactggt tatattcact agatattgtc aaaaagtagc 180
tctegaaccg acgaccaacc atccacgcaa ttcatatcga gactgtcagc acaactacga 240
ccatgccaac catgtttgtt gtgacacatt ggatagtcaa gcattttgag gaatccttgc 300
atataagaaa cgtgtgttcg ccgatgaaat tgaggaaaaa gttgtagtgc tgaaatgggt 360
cgtactcgtg ccagcgtat 379

<210> 97
<211> 341
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-F4
<400> 97

cccggggcca accaagcctt cagacaaggc gtcggcaaaa gtataaggag gttactcagc 60
aagaatgcc a gtacgtccaa aagtcgtatt gtgtcgagta tgaagaatgt cagcaagtta 120
cccaggaagt ttctccttca gaaattgtct actacggtga atcttcttct agcagtagtt 180

actactacta gaacacttgt gaaatgcgca aagtcgcaaa gtagagtgtt cttttttgaa 240
 taaactgtta ctttttgtca aaaaataaaa aaaaatgaaa aagaaaacaa atcataaagc 300
 ataaaagaaa gcaaacaata acctgaaaag acaagtatag g 341

<210> 98
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-F5
 <400> 98

agcccacgcg tccgggaggg aatgaaggga agttatggca aaaacacgtg ccagcagcag 60
 cggtaaaacg tgtgtagcaa gcgtagagca gaagaactgg gtgtaaaggt cgagtagtag 120
 agtaagtgtg aaagggaaag gaaaggagag aaagaggaaa gggatgaaat gcagagatct 180
 ctagagaaaag gcaagaaaga aaagaaagga agacacagta aatgaggcga gaaagcatag 240
 gaagtgaac ggattaggaa cccgtgtagt ctatgcagta aaagaaagaa tgagtaagaa 300
 aaaagggagt cattccacca ggggagtaaa ggcgcaagaa agaaacccaa agcaattgac 360
 gggaatcgga aaaaggggtg gatcacgtaa attaatccga tata 404

<210> 99
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-F6
 <400> 99

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 tgaagcaaaa tatcctaaaa aaagctttgt tcgcaagtct cgttgcttga acagttctcc 120
 tcctcctcct tcttgttggt gtcaaaacaa gttgtccaat aaaacgtggt gtgatagacg 180
 caagtttttg aatgatttgg tatggacaac gaaaagtgtg gtggtaacaa gtgcgagtta 240
 ttttctcctg ggtaatacta ctgcttgggc agcgaaagaa gaaaaacaaa gtgtccctgc 300
 agcagttgcc aatcaagtgg agacatacaa agacttggtg aaaggttata anatattgcg 360

gccgataggt tggaatcaat ttgctggaca acgaaaccaa 400

<210> 100
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-F7

<400> 100

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ccttaaccag agcggatcgt cttggttggtc aagttttggg ttcatttgga gcattacctg 120
atgtatatca tgagttggaa gtgaatttct ttctgttgag aagactttta ggagtgaaag 180
tagatggtca aggcaaatta gccaaaggta aaaaactggc caaaggagaa gtattaatgt 240
tgaatattgg ctgcacaagt acgggaggaa gagtacttgc ggtgaaggga gatttggcaa 300
aactttcggt gacgagtcct gtttgtactc aagtgggtga aaagattgcg ctttcgagaa 360
gagtagaaag acattggcgt ctcatcggtt ggggtcaga 399

<210> 101
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-F8

<400> 101

agcccacgcg tccgcccacg cgctccgcca cgcgctccgc actggtcatg gaggaagaag 60
cgttattcaa gtaagcaggt tgtcttgtgg ttgtaatatc acagagaatt tctagttatg 120
tgaatcaaca ttcggaagaa tatatacacc gtttaaggga agccgttgct ctggattcag 180
ttagttcgga tccaataaaa cgctcacgtt gcttgatat ggccaactat atttgcaaat 240
ggatcgaaaa attgggagga aagcctatcg taaagcatat aggcaagcaa acgtttcctg 300
atggccaagt tttggactat cctcccatcc tatttggaga ctttactggt ggacacaagg 360
agaaaacagt gctcttggcc tattgtcatt acgacgtcca a 401

<210> 102
<211> 343
<212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-G1
 <400> 102
 gacatgtcta gctggaagga acgactagac tcgtggattg gaaggagtag cagtgaatat 60
 tccaaagggtg gcaactcttc tccagaaggg ggttcattctc ctaaattggg tagcagtcct 120
 tcgaaactaa gcaaaagtcc tcgcgtcaa gaagtttgga gtaaaacagt gcataccttgg 180
 gggcgttctt actcaggaaa gaaacgttat gacaccgtgg agaaggacac agagaaggaa 240
 ccaagtatat ttgagatata tgatctgtcc aagaaacaga gtggcagcca ataagaagag 300
 agtttgtgag ttttcaatac aatactgtgc ttgttgtaa aaa 343

<210> 103
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-G10
 <400> 103

agaggagata tttttcgcac ccagctggag actttgtttt gtatatattgg agaattttca 60
 tttcagcagt gtctcgtttt ctgtaatgac aaatccatat tggatagata ttgttacgag 120
 ttgagaaaag ctggattctc tgcagatttt actagtggag atctgaaaca gtcgacgaga 180
 aatgaaatat ttcgacgctt ttatacacac aaaactcaag tcttggtttac aacggacctt 240
 ttggccagag gtattgattt tgtgaactgt aatttggttg tgaatttaga tattcctcga 300
 acaggagaga cttatttaca tcgagcagga agagctggac gctttggaag atttggaat 360
 tgtatcactc tctattcatc gacaacacgt tctgacat 398

<210> 104
 <211> 225
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-G11
 <400> 104

ggcccacgcy tcggcccacg cgtccgtcaa agccagaggt gcttcttctg ccgcttctgc 60

agctgcgga atagtcgatc atatgagaga ctattggcat ggagctggtg accgatggtg 120
ctctgtagga attcctancg atggaactta tggaaattgat gaaagacttt ggtattcatt 180
gccggtaatg tgtcctgttg gacattatag acggttcttg aacct 225

<210> 105
<211> 402
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-G2
<400> 105

ttgggatgcc gcagaaaacg atgatgggat acacctctcc cgagcaagcg ctgttgagct 60
tagcatccat caagaaaacc accaaaaagt taaagaagca cttgcaaaaa tacttggatg 120
aaacaaacac taagaacaca gaagatgcag aaccactgga acgtgcaaag gcaaacctca 180
atattggcata tatatcggcg gcccttttct acatgcttct tcgagttcac ggggtggaaa 240
cttcaggaca tcttagcatg gaagaactgc aaagaatcaa ggaacgtttt caagtgtctc 300
gaaagttaat tggacaagaa gatactcggt cactgggtat agatgggtgag gcgacgggta 360
ggatttttagc agccactctg aaagatctct cagcgggacaa aa 402

<210> 106
<211> 401
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-G5
<400> 106

agcggacgagc tgggcggacg cgtgggctac aatgggaaag ttacaagtag gagacgaagc 60
acctgacttt gagttgaaag accaagacgg taatatagtt aaattgagcg agttcaaagg 120
aaaatatcct gtagtcctat tcttttatcc caaggacaag acgtatggct gcacacgtga 180
agcttgagctg ttccgagata agatgtcgga atttaacgaa cttaatgcga aagttttcgg 240
tgtgagttcg gacagtgtag agtctcacia gtcgtttgcc gatgaacaaa agttgacgtt 300
tcccttatta tctgatgaag gcggtaaagt acgcaagcta tacgggtgtac caaagagcat 360
gtttattatg cctggtcgct gcacttatgt cattgggtccg g 401

<210> 107
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-G6

 <400> 107

agagaatggc ggtcctaaca gtaaggatcc aaaggtagcg aaacaagaga agggaagtaa 60
 aaggtaagaa agaggaaagg tttagcgagag aaggaagtag aaagaagaga gtgtaaggcg 120
 gcgtcataat agaaatccga aaggagtaga agaaaagaga gagaagaaag aaaagaagag 180
 aaaagccgta ctgaagaccg acacaggtac tcgaggagaa aggagacca aattaagggtg 240
 agagaatgga cgataaggaa ctaggcaaaa ggatatggta tctgcggtag aacatatgaa 300
 agaagcagca ccgactgttt agcaaaaaca cagcactctg cagaaaagag aaaatgtaaa 360
 gtatagagtg tgcggcctgc caaatagtag agaaggaaga agcag 405

<210> 108
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-H1

 <400> 108

cgatgacttt gacaaaaatg gctttcatatc gggattttgc tactgtggat ttgaattcca 60
 gagaatggaa aatgagtatc tcagaaagag ctttcaatta agggaagaag atggaggtgt 120
 tctggtgaaa aggattgctc ccataatctcc ctgtagcaaa gtacttcaaa aaggggacgt 180
 ggttactcac tttgatgggtg ttctatttgc aaacgatgga acagttgcct accgaggtgg 240
 agaaagaatc aactttcact atcttggtac tttgaaattt gtgggtgaac catgcaccgt 300
 tcgtattatc cgtgacggga aagaaatgga agttacttat cctttgtttg aactaccttt 360
 attggtaccg atacatgaga aaaggtccgt tctgaatac 400

<210> 109
 <211> 396
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-H10

<400> 109

atggatattt ttgcccttgt tctcgcgttc ctattggaac caggaaacag ttcacatctc 60
aaaggctttc tttatttcta gttcctggag ttggtagggt atattcaagc agaaccaaag 120
taaacaccaa tatttgcacg aaaaattggt tccccgctct aaaaaggctt tctggtagtg 180
atacttacia gatgtctttt tacaaccag tcttggcaaa cttcaagtgg tcatttatcg 240
taaactctgc aatattttca gttttgttgt tcaataacca acgggtattg actcgaaggg 300
gtgtaattca cgcatacgtc ctaggggtgt tgctctgggt ttgttttgggt tatgctgggt 360
gggtcaactg tgtcctgttt ctcgttctaa gggtcac 396

<210> 110

<211> 359

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-H11

<400> 110

cccacgcgtc cggaatcacg gcatatggga aagccaagcg gaacagcgcc aaggcttcta 60
aagataagaa aaaaaagcaa aaaacagttg taacaaacat tcaagagagg gaacaggagg 120
agagaatctt gaaagagttt gaccttaatt atcaatttgg accttgtgtc tgcattggga 180
gactaactcg ctggaaacgc gcacagtcac ttggtctgaa cccccaaaa atagtttttg 240
caatattaga acggagagga tcagaagtgg acgaagattt gttccaaacg tataagaatc 300
ttatttaact tgtttcaatt tatgtgaata taataaactt ttgaaaacgt tgtttggat 359

<210> 111

<211> 206

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-H12

<400> 111

agaaacgctt tcagctatca catcgactgc tcgatgatag cgaatcagat gcccgttgcg 60
caaccatcg cacttgtctt cgttgatcaa caccacaggt aaccgtattt tgtataaatg 120

attggaata catcgaacaa acaaaaaaat aaaaaaaaaa aaaaaaaaaa aaaaataaaa 180
 aaaaaaaaaac aaaggaaact aacaaa 206

<210> 112
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-H3
 <400> 112

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 agtttcagaa aatttattga gaaagttgac ttcagcccct gaagaggtga aagaatctcg 120
 agttgcagtt gaaactgac gtgataggca gttagtagaa gcagtacgag aagaagagag 180
 aaataagaga agacaacttg tcgaaagggt tcgagagagg caacaacgta aagctagaca 240
 aaggaagaa agagaaactg ctctcgtgca agcacttggt caggatctcc aaagatccaa 300
 ctttcgtccc aaaatgaaga ccgtattgtg tgagtcagaa agaaaggcct gcatggaatg 360
 ttatcgagag aatccaagtg atcctttacg ttgtgcagaa 400

<210> 113
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-H4
 <400> 113

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 aaggaaggat ttattatgga atgtaaagca ctaaagagag tgagagacga gatgggactc 120
 aagaatgtga aagtaatgat tccattttgt cgtacagtag aagaaggcat tcgagttgaa 180
 gaaataatgg cagcacaagg cctcaagcga ggtgaaaatg gactggagat ttatgtcatg 240
 tgtgaaatac cttccaatgt cattatggca gatgagtttg ccaaaatatt tgatggtttc 300
 agtattggat ccaacgactt gacttcttta gtattgggct tagatagaga taacgaaatt 360
 attgcacatt tgtatgatga acgaaatcc 389

<210> 114
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-H5

 <400> 114

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 ccgaatcagg gtaagaggta gaggagcaag aagagaagag agaattgctgg gtggagtagc 120
 gaaacaagag aagggaagta aaaggtaaga aagaggaaag gtttacgaga gaaggaagta 180
 gaaagaagag agtgtaaggc ggcgtcataa tagaaatccg aaaggagtag aagaaaagag 240
 agagaagaaa gaaaagaaga gaaaagccgt actgaagacc gacacaggta ctcgaggaga 300
 aaggagaccc aaattaaggt gagagaatgg acgataagga actaagcaaa aggatatggt 360
 atctgcggta gaacatatga aagaagcagc accgactggt t 401

<210> 115
 <211> 302
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-H7

 <400> 115

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 ttgcaaatat gaactttaaa gtgcgtttgt gtgacattca gaagaatcgt gtaaatttga 120
 caaccttctt tgcacctcaa gatagtgtct catatgctga tggcgcgttt ataataaca 180
 tactgaagtg ttgaagcaaa agtatttcgc tcgtttttac tcggtacgtc acatagattt 240
 ggttgaagtt gctctgtttg tgctaggcat cttggcaata aaggacaatt atgttgagtt 300
 tt 302

<210> 116
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-002-Q1-E1-H8

 <400> 116

agcccacgcg tccgcccacg cgtccgccc cgcgtccgcc caccggtccg agagaggaat 60
cgatcaagca gtcaaggcag ttacagagaa acttagaagt atgtccagaa agattaattc 120
gaaagaagaa atacaacaag ttgctacgat atctgccaac ggagatgaag aaataggcag 180
tttaattgcc aaagctatgg aagctgttgg gagagaagga acgattacag tttctgatgg 240
aaagactgta gagaatgaat tggaagtagt ggaaggactc aagtttgatc gtggctatat 300
ttcaccttat tttgtgaccg atgcaaagac acagaaatgt gaatttgaga atcctctcat 360
tttatgtgtc gagaagaaga tatcttcggt gaatgcaatg ct 402

<210> 117
<211> 411
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-H9
<400> 117

gacgtagca gctgcagata taagtcaaca tatttccact gccggtacag aagcttcagg 60
tacctcta atgaagtttt cattgaatgg tggccttatac gttggaactt tggatggagc 120
caatattgag attcgggaag aagttggtga ggagaatatac tttatatttg gattgaatgc 180
cgagcaagta gaagaagaac gaaagaaact taatccttct tatgtgctga atgagaagct 240
tgcaaaagta ttggaatgga tagagtctgg aacgatggta gatgctaaga aacatcaacc 300
cattgtggat tcactaagag gaggaaaaga ctggtacctt gttggtgcag actttgaatc 360
ttatttacia atacaagaag aagtggaccg cgtattccga gatcaacccg a 411

<210> 118
<211> 417
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-A1
<400> 118

cacacgcgtc cgaagaagag cgtgcgtgga ggatggattc cgttattgca ctagttggga 60
aagactttgt tttatcagca gcagatactg ccaacgcgcg ttcggtcata gtaatgaaag 120
acgatgtgga caagatattg gagctggata gtcataagac cttagctatg ggtggggagc 180

cagggtgactt tgtgcagttc acggagtata tacaaaagaa ttttcacctt tacgaattcc 240
aaacgggatt gcaactaagt actcacgcag ttgctaactt catccgtggg gaattggcta 300
gattgatacg ggaagcccc gtattaacca acctactttt ggggggttat gattctgtgt 360
ccgggccttc actgtattac atcgactatc ttggtacttt ggaaaaacta gactata 417

<210> 119
<211> 383
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-A11
<400> 119

cacgcgtccg gaggcgtcat aatagaaatc cgaaaggagt agaagaaaag agagagaaga 60
aagaaaagaa gagaaaagcc gtactgaaga ccgacacagg tactcgagga gaaaggagac 120
ccaaattaag gtgagagaat ggacgataag gaactaggca aaaggatatg gtatctgcgg 180
tagaacatat gaaagaagca gcaccgactg tttagcaaaa acacagcact ctgcagaaaa 240
gagaaaatgt aaagtataga gtgtgcggcc tgccaaatag tagagaagaa atcgatgaaa 300
gtgaaagcga gtaaaagatg aggtatagag aatggcggtc ctaacggtaa ggatccaaag 360
gtagcgaagt aaatagacgt ttg 383

<210> 120
<211> 399
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-A2
<400> 120

cacacgcgtc cgcttgaatt tttctttggt gtttccttgg cacatatatt ttgttttctt 60
ctctccagca taattggcta ctggaacttt gacacaaaga gctggctttc gaataatatt 120
ttgggctcga gtatgtcagt attgggaatc gaattgcttg cgttgggtga tttcttgagc 180
agttgcattc ttctgtttgg tttgttcttc tacgatattt tttgggtctt tgcttcgaag 240
ccagtatttg gcgctaattg tatggtcacc gttgctaaaa gctttgatgg acccatcaag 300
ttgatattcc ccaagactat ttccggaaat tcccaagaat attctatgct tggattgggt 360

gacatagtga ttccaggatt gtttgttgct atgatttta 399

<210> 121
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A3

<400> 121

tccgaaggtc cagggacgcg tcagcaaacy cgtaagcgac ggcattttctc tccggataacc 60
acttgtggta gttcgagctg ccatcccttc tgggtgccgt tctacagttg ttactgatct 120
tgtgacgcga tcctttacaa ggaaattgcy tccaatgtcc tgtggagcca gaagagaacy 180
ttgttggttat ttcagccatc aaaactatta gcacactcca gaaagcattg cttcacacaa 240
atactaacca gttaagacct tccatagtgc tatttgtacc tgaaattatt gctcatgcta 300
atgaccatgt ttaagcactt cttcagatag ctggtgaaaa gaccgcatac agaatactct 360
ccagaataga ttcaacgata gatgatataa taagcac 397

<210> 122
<211> 437
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A9

<400> 122

cggtcgtact tccggggcca ccacgcgtcc gaaaatgggt gcaaagactg ctctgagttg 60
cctctttctc tctttcctta tcgctgccgc agttgcagcc gacgtagttt cagaggagag 120
atggggatat gtcagcaaa cccaacaaca gcaacagtgc caacaagtat gtaaacagta 180
tgcatactat cagagtccag tctgcacttc cgtaaccaca cagagcccat actggacca 240
atgctcgaag actgtgcaaa cctttgtccc aagccagtgc agtacttata cccaatctcc 300
tacatggacc tattgcagca cctacaccac cactagcgta ccatctcaat gcagcaaggc 360
cgtgactact tatactcaaa cctgctgtgc ttatgcccaa caaacttcct atgcagtcag 420
taccgagcaa tatgttc 437

<210> 123
 <211> 344
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-003-Q1-E1-B1

 <400> 123

 cggacgcatg ggtgtttgtc gttttgtcga ttctagaaac gacacttttg cttttaaata 60
 gaatactctt ctacgacaac tttttcgtat tcttgtttgc aaagctcttc cttatattct 120
 ttgtgcttgg acaatggttg caaagactgc tctgagttgc ctctttctct ctttccttat 180
 cgctgccgca gttgcagccg acgtagtttc agaggagaga tggggatatg ctcagcanac 240
 ccaacaacag caacagtgcc aacaagtatg taaacagtat gcatactatc agagtccagt 300
 ctgcacttcc gttaacacac agagcccata ctgggaccaa tgct 344

<210> 124
 <211> 289
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-B10

 <400> 124

 ggggtgcaac caaaggttgt tgtaaaaaca ttaatggcaa cgggtccggtc caaaccgag 60
 gaggacccat ggaaaccttt gaaccttata aaaggaaaaa ctttttaagg aaaaattacg 120
 gatggccaat ttgaaatcca ccgttgaaaa gttgtcttaa aatttagaaa gaaatgcttt 180
 cccggttaaa aataaaaaga attctaagct aatagagtat ttaaatgaaa aagacacaaa 240
 taactactga tcgtttcgta cgtaatattc ttcaaaacat aaagggggg 289

<210> 125
 <211> 312
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-B12

 <400> 125

 cttcaacgtg gctcaacttc gagatgatct caacaaagct aatagagtat ttaatgaaga 60

gacacaaata actactgatc gtttcgtacg taatattctt caagacgtgg acgaacttga 120
gtcagtctca ggggttgcttg aagataaaac aaggacgcct aggaaaattg agaatactca 180
aaagtgggtg aagaagttgt atcacgactt tgatcgtttt ttggctttat atccagaatc 240
ctgaaaggaa agaccgaaag tcgaggggct tctcatggaa gaagaggga tgcaataaaa 300
cattttgggt ac 312

<210> 126
<211> 296
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B5

<400> 126

cgtccgcaaa gaaatgacgc agtagatcag agagtaacac atgcaagtaa gtacaacgaa 60
cgggtgagtg tataagtctg aatggagtct gtgattctga cgccacacat caatgtaaca 120
agtggtaata ttgaacgcca caagcgatat aagaggggat atccgacagg acgatagcta 180
cattgggact tagaaagagt ctcacagaa tatgtcaacc ctagtgaaaa tggatcaagt 240
tcaaggagaa tctgaaccat ctgtaagcat ttgggttcat aaacaatgcc atttgg 296

<210> 127
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B9

<400> 127

cggggccacc cacgcgtccg cacacgcgtc cggaaagacc gcaagtaaaa aagggactgg 60
agaatttgag agcttatcgt aagaaggat tggatatgtg tagcgctttt caaaagacca 120
caactggaaa tccagcaact tgtgagggat aacttcaacg tggctcaact tcgagatgat 180
ctcaacaaag taagtcatat gtgctgttgt tgatcaaatt taaaagaatt ctaggctaata 240
agagtattta atgaagagac acaaataact actgatcggt tcgtacgtaa tattcttcaa 300
gacgtggacg aacttgagtc agtctcaggg ttgcttgaag ataaaacaag gacgcctagg 360
aaaattgaga atactcaaaa gtgggttgaag aagttgtatc acgactttga acgtttttt 419

<210> 128
 <211> 251
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-C1

 <400> 128

 gtccgaacca agataaggta tcaaagtaaa gatagaagga tatagagaag aacatagggt 60
 aggcttagaa gcagcatact tcagaggaaa gctttaacgc attactgaaa atgaaacccg 120
 acccgagaaa gaaaacgtta gaacttcaga accgatcaag gttaaattgt caagaaccag 180
 cttacaagag tcaaattctgg gttgaattcc taaaccatac aaaggagtc ctctcttaga 240
 aaaaagtccc g 251

<210> 129
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-C12

 <400> 129

 cgagacgcgt gggaggcaga gtcgaacata gctgaattaa aggaagaact ttcgtcagtt 60
 gatgagcaga ttcagtccag gaagaagcat ctccaagtgc ttgaaaatga agcactctct 120
 gttatggaga actataagct ctgcgaagag gagcagaaaag taaaggaaga gaaactatca 180
 aagggtcaaaa gagagtacga gtcttataag atgcagactg catcctctcg taaagaagag 240
 tcccgcccttg aaaaccaaat cgatgatgta aagaagaaga ttcaagacat ggactcgaag 300
 attacttact ggactaaaga agaacattcc ctgaaagttg aggcagaaga gcacatcgtg 360
 gatttgcaaa acgcaggaat tcctgtcact gat 393

<210> 130
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-C2

 <400> 130

atggcaacca cgtgttgaag agtggagttg caacgttgac acaagacact cccaagaatc 60
aaccggtagt ggtgtttaat cagagcgaga taccgcttgg ttttggtgtg actgctcgtt 120
cttcttttga agtgcaacaa gcgaattcga cggatttgat tgtgttgaat caagcggata 180
ttggaagtta tttgagagat gaagatcatt ttgtaggttg tgcgctataa taacaacaac 240
tccaatagca atgtctatcc atatatacct ttatatatat aaatatatat atattttgtgt 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaatataa aaaaaaaaaa caaatcataa 360
atttgcaaaa ca 372

<210> 131
<211> 398
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-C3

<400> 131
ccacaagaaa gcagtcgtcg acccctgtca ccagctcaga gctataacag ttttttgctt 60
taacttatac acagaccagt tccatccgaa cgagtatttt gccttacgaa acctacttcc 120
tccacttact gaatcgctcc actctcgata cgcaagtgtc ccttctcggg tcttcacgta 180
ttcaactttg ggtggaacca caactttcag cccaaaaccg tgggaacccg tcaatttcaa 240
acccttgtea atcaaacatg ttctcaaac gacccaattt ctttccatcc aacagatcag 300
aatatcgggt acggtattaa cacctgcaag gtatagcaaa tattttctcaa tagtttgga 360
aaattccgag gaatacgaca tctaaaatac cagatgca 398

<210> 132
<211> 423
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-C5

<400> 132
gatagtggaa tgaaaaacgg ttgtccttga tgaaaaagtg tcaacttccg gttctccctg 60
aagacattga atctcaaatt ctggaattat tagagtatgt aaaggatggt gctgttgcta 120
gaatgggttg taagcgatgg aagagactcg tggatgaaaa ttccaattg tggagacgac 180

ttcaaggctt tacactacca aaacgactac caagtgaagc ggaaaagtgg tatagaaagg 240
cagcggaatg tgggaatcga gaggcaatgg tgcttcttgc cttgctctat tattatggat 300
atcagagtca ggatgccaca gttttgtctt tgacgtttct tcgaaatagt gtcgcttggt 360
agtgaacga gcactagtgt cgttggtgag gtatttataa ataaataaat ttgtctttgg 420
tgg 423

<210> 133
<211> 420
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-C6
<400> 133

gcaagcgtga agcgtgaggg tagttcatca tgggtgagac agagcttcaa gatgggtgttt 60
gtgcttctct ttggactgtt cgtctcttcc tctacacatt tatgttatca ttctctgcc 120
cgatcattgg cttggatgga cgtaaagtat atcacatatg gaatgacagc ttattctatg 180
atgggaagta tcattaactt ttgtgcttaa tctgcctctt ctgttgtaga aggacgggat 240
catggaccgt gtaaatatgt catggccttg gcgtccaaaa ttttgattct agtctttttc 300
ttgtggcttt ttacatttgt agatgcgttg taccctatgc ttaccaagtc ttggtttatc 360
gaattgcgta tcaacgtggt tcaaataatg tgggtggttg ttggagcgtt tgtggtatct 420

<210> 134
<211> 378
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-C7
<400> 134

gatggtaag aacggtaccg tgctatcacc tctgcgtatt atcgaggtgc cgttgagca 60
cttctcgtat acgatatctc gaagaaggaa tcctttattg gtgtagaaaa atggctaaaa 120
gagcttcgtg atcacgcgga tagtaatata gttatcatgt tggtaggaaa caagtcggac 180
ttgaagcatc taagagcggg gagcacggat gaaggaaggg agtttgcgga gaagcactcc 240
ttgtcgttta tcgaaacttc tgctttggat gctaccaacg ttgaacaagc ttttaccag 300

ttgctgactg aaatatatcg aattgtgcat aagaaagctc ttacaattga gaagaatagt 360
tcgttcaaac cggctctg 378

<210> 135
<211> 417
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-C8

<400> 135

aagaaatccg aaaaagaaga gaaaaaggta agaaagagga ccgaatcagg gtaagaggta 60
gaggagcaag aagagaagag agaattgctgg gtggagtagc gaaacaagag aagggaagta 120
aaaggtaaga aagaggaaag gtttacgaga gaaggaagta gaaagaagag agtgtaaggc 180
ggcgtcataa tagaaatccg aaaggagtag aagaaaagag agagaagaaa gaaaagaaga 240
gaaaagccgt actgaagacc gacacaggta ctcgaggaga aaggagacc aaattaaggt 300
gagagaatgg acgataagga actaggcaaa aggatatggg atctgcggta gaacatatga 360
aagaagcagc accgactgtt tagcaaaaac acagcactct gcagaaaaga gaaaatg 417

<210> 136
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D1

<400> 136

gatgtaacac ccgaagagtt tcttggcgat gttttgggtg atatcaattc acgtcgtgga 60
aatgttttga atgtcagtga ccgtagtaat cttaaagtca ttcaagctcg agtaccacta 120
gcgagtatgt ttcagtacgt ttccactttg cgttcaatgt ccaaaggcag agcttcgtac 180
agcatgtttt tagacgggta tgaggtagtt cctcagcaca ttgaaaagga gttgttgagt 240
aaaggaggag ggtcttcgtg atgagaataa acatttttatt gtgaggttgt aaaaaaaaaa 300
aattccctaa atatttaciaa ttttaaaaaa aaatcaaciaa catacaciaa agggggggcc 360
ctctacaggt ctaaagctta tataaaaaaa aaaggggagg ccccc 406

<210> 137

<211> 409
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-D11

 <400> 137

 gtcagaactc aagcgttgca gcatttgcaa attctcaagt ttactatcag agctcacctg 60
 ttatgcaatc gtcagctggt gaggtatcca caaaagcagg ttctgtatct gaaggaaaac 120
 tgtattcggg aagtggttct tctttacata atgacaagtc cgattcaagg atttccaacg 180
 atataggaaa taacaccgtc tcgaaccaac atgggttccaa gtcggcagtt tccaatactt 240
 ctgcacaagc caacaaaacg gtgaaagttc atttgggtatt ttgtccaagt gacgaagaaa 300
 tttcaatgga ggagttgcga gctcagttac caagatatca aagacagatg atatcgtcgt 360
 cgtcgtaatt cgtatctatg ctttaagttt tcatcttttt gctaacacg 409

<210> 138
 <211> 326
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-D12

 <400> 138

 gggatggaag ctagacaaag tatactagag aacagttcaa cagaagacaa cgagtctttt 60
 tctgcagaac aactcgtgaa acacaaggaa aaggaactgc aaacacttgt aaagataaaa 120
 gaatacacc aagagatatt aggacaactc aagttccgag taaaaacttt tgaaaaatat 180
 gataccatat tagctgatgc cgtagaaaca atagcgcatt ggaaagaaat ttctcgttgc 240
 agcgccaata tcttagcgga taaagaatac gtaaaagtac ctttagaaga taaaaagcag 300
 taaatttcct aaatatttac gatttt 326

<210> 139
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-D2

 <400> 139

cggacgcgtg gggatacacc gtgactttgg tttgttgata agccacgtaa attttgccgg 60
 tgagagaacc caaacgacaa ccagaagaca atacttgagt ttgccactcg tttttgttat 120
 gatggttatt cgataccgcg gtgggttcttg gttcatgggt cacaggaaat acgataggtc 180
 cctggggttg aggatcgaac aactggatga cgattccgag tccttcaaac ccaacctcgt 240
 taccatatgc gggaccataa gttggtggat gtttggtata ccaaaaagcg aaatgggtcta 300
 ctgcgggctg aaactccttg gttcctatcc agtagaagaa gctggcggtg aagttggtgg 360
 tggtgagtg tgcgacgtg tacatagtcc caaaggaggg tgctttcaag ctggtcagct 420
 gta 423

<210> 140
 <211> 387
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-D4
 <400> 140

gatcatgaat gtatTTTTGC gttcgttgat tcgtgactg gcctcccttg tgtttactta 60
 ctacagaatt tcgccaata tgggggttga acaagctttg cccgtggctt gccctatagt 120
 aagcgaagtt cttagtgtt ggcaagtttt ctgtaggaga cctgactgga gtctgggact 180
 gacgactctg actgaaactc caaataattt gtcaagtttc agtcgtctca tgtgtttact 240
 tttctttgtt ttgcgtgaga tcgcagtttc tgcgggagtc tgaccgggtg ggagagactt 300
 cagcttctct ttacaggaat actttgctaa cttgttggtta tttgttttgc ttgaaagtaa 360
 atataaattg catttgtttg gaattgc 387

<210> 141
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-D5
 <400> 141

cagttacttt agaactgggt ggtaaatctc ccaatatatt ctttgcagat attgcaaattg 60
 agaatgacga attctttgaa aaggctgtgg agggctgtgt catgtttgtt ctgaatcaag 120

gagaagtttg tacttgtcca tcgagagctc ttgttcacga gtccatttac gacaagttta 180
 tcgaaaaggt gattcaaaga cttggtaaaa taaagcaagg agatccactc aatttggaga 240
 ctatggtggg agctcaagta tctactgaac agatggataa gattcttcac tatgtggaat 300
 tgggaaagaa ggaaggtgct cagtgtattg ttggaggaag tggaaagaaa gctattggag 360
 gtgatttaga aggtggctat tacattgaac cgacgatatt caagggagat aacaagatga 420
 gaatattcca agaagaaata tt 442

<210> 142
 <211> 171
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D7

<400> 142

cacacgcgtc cgataaggcg ctggaatatac ttttgaaaca agcttccacg ccaaagggtg 60
 cttcttcttc ataagaaagt tatatacttt tctccatgtc ttgatatgag tcccgttctc 120
 ttctttttat ctatatataa ataaatgtgt tttcggaatc aagtttcaag g 171

<210> 143
 <211> 334
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-003-Q1-E1-D9

<400> 143

cccacgcgtc cgcccacgcg tccgccttac ctctccaaga aagtgttgca cggctgtcga 60
 aagaacgtgc tgtgaagtga gagaacgtac gagaaagcca agtgaggaaa agaaggcaag 120
 tanagggcgg cccgagaaag gagagggcgt aagacgtgat acagagtagg aagaaaagag 180
 aagagagcta gaaaggaggt aaaagaagag taaaaggact agaagaggta cggaattcac 240
 gaagaangag cgtgaaggaa ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg 300
 aaagcgtgaa cggattttgt acacactgcc cgtc 334

<210> 144
 <211> 253

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-E1
 <400> 144
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 atcgacctcg gatacacgtg agactgctat ctaatatga ggaaatctta ctaggaggaa 120
 gacgtaacct gttttatctc ccccatgaag cgctgtctga aagagcaacg ctggcaaaag 180
 atatatttgc ctgtatagct tatagcttac acgctttggt gccttgggtg atgtttttct 240
 acctttgttg ttt 253

<210> 145
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-E11
 <400> 145
 atctttttctg gggtttctgct ctaggtccaa ctcttgggt ggttgcttca gaaatttatc 60
 caacctatct acgtagtcac ggaatgttgc tatctgatgt taaaaacttt acaggcaact 120
 ttattactac atacgcattc aaacatatga ccaatgcaat gacgaatata ggtacctttg 180
 ttgggtttcta tggaggtctt actattctcg gttggatgta tctcatgttc tttatgccag 240
 agaccaaaga caagactctg gaagaattga atgaagtatt tgaaaggccg acgatggaca 300
 tttttagaga aaatgtggtc cgagtgaag aaacttgcaa tgatttgatt cacatgcgtt 360
 ggagaaatat ttgggtctta tccaaataga cgtgtttttc ccgtttg 407

<210> 146
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-E3
 <400> 146
 aattgtaccg aaaaaaacac ttgtgacaac ctgactcggg ttactgaca gatattctgt 60
 ctgggtggtt ttgtattgct catcaagtct tgaacagagc tggtttgat attttgatga 120

caaacgggac gagtttcttg gttttttgaa gtaacttttt cgtctccaaa actgtagcag 180
tcatttgccg tagagtgtaa tgtttgtag aaagtccata gaaagctgac ctgccaatgc 240
cattgtttat atgggaagag tcgcgtatth tttgtattgt cgttcacaac aaggttctct 300
tttgatgttt tttcggttct tcggagtag tgctgtgttg aaaactagca atacttttgt 360
agtgaggcaa gtttcttgct attttgtcta gagacaagtt cgtttgtcaa ctcatthgtc 420
ttttgcgtcc ctggagttg 439

<210> 147
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E4

<400> 147

cacacgcgtc cgcccacgcg tccgcccacg cgtccgaaaa tgagcaaata ggaatatatg 60
gatttacaag gacaagccac ttgtgaaaaa tatgccaaaa aaggcatctt gtggacaacg 120
ttggtcgcct tgatcgttgg actagtcaca gacgattacc tgccaatggg tcaagtatth 180
atattgggag tagttttggg agctatggta agctgtctct atgtgtttat tggacacttc 240
tatttccaat cctatatact tgtagggcgt acttttcccc tggccatggg atacaagaca 300
tccacttggt tttgtccacg ccgcaaccaa aaacaacaat aataacaacc attcttaacc 360
aaaaaaaaagc aaatttcaag acaaattagt caagagacaa attcatttgt caactcaat 419

<210> 148
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E5

<400> 148

cccacgcgtc cgcccacgcg tccgaaagct ctctcttata ttctttgtgc ttggacaatg 60
gttgcaaaga ctgctctgag ttgcctctth ctctctthcc ttatcgctgc cgagttgca 120
gccgacgtag tttcagagga gagatgggga tatgctcagc aaaccaaca acagcaacag 180
tgccaacaag tatgtaaaca gtatgcatac tatcagagtc cagtctgcac ttccgtaacc 240

acacagagcc catactggac ccaatgctcg aagactgtgc aaacctttgt cccaagccag 300
 tgcagtactt atacccaatc tctacatgg acctattgca gcacctacac caccactagc 360
 gtaccatctc aatgcagcaa ggccgtgact acttatactc aaacctgctg tgcttatgcc 420
 caacaaactt cctatgca 438

<210> 149
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E6

<400> 149

cacacgcgtc cggttttgtt gaattttcga ccggaataga gtcggttggt ttggtgcactt 60
 tgtcattctc ttcattggag tagtagtggt gttggttgag ataaagacat tgcaacatat 120
 ttgcttttac gttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaggggggg caccceaaaa ggttcaaact ttacttacc ttgaatcaaa 300
 cttcaaaact cctcaaaagt gtccceaaaa ttcattccaa gggccgcatt ttaaaaactt 360
 ctagagtgga aaaaccctgg tgtaacgaaa ttaaaacca ttgaaaaaa tcccctttct 420
 acaagcgggg ttaatcccaa aaaggccccc 450

<210> 150
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E7

<400> 150

cccacgcgtc cggagtagcg aaacaagaga agggaagtaa aaggtaagaa agaggaaagg 60
 tttacgagag aaggaagtag aaagaagaga gtgtaaggcg gcgtcataat agaaatccga 120
 aaggagtaga aaaaaagaga gagaagaaag aaaagaagag aaaagccgta ctgaagaccg 180
 acacaggtac tcgaggagaa aggagacca aattaagggt agagaatgga cgataaggaa 240
 ctaggcaaaa ggatatggta tctgcggtag aacatatgaa agaagcagca ccgactgttt 300

agcaaaaaaca cagcactctg cagaaaagag aaaatgtaaa gtatagagtg tgcggcctgc 360
 caaatagtag agaagaaatc gatgaaagtg aaagcgagta aaagatgagg tatagagaat 420
 ggcggtccta acag 434

<210> 151
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-E8
 <400> 151

cttatgtagt gtttggggtt ctagcacatc tcatgtctgc ttctcagtgg cacagatctg 60
 gtacgaagtg ggtgctagaa tcacctctcg atcagcaagc caagggttat cagaagaaag 120
 atagcaggag tagagatagt caatatgatg atgacgagta ttcaagacaa cgagataagt 180
 catcaagtaa aaaagagtcg tccttccatc ctcccatacg aaatacgaag caaaactatt 240
 atgatgtggtt acaagtggat cccaattcca gtatggagga tattaaggct tctttttatc 300
 gcttagtatt gaagtatcat cccgatcggt ttcttgagga tgagtcttgt gcagagaaaa 360
 tgaaagaaat attggaagct tattcagtag ttgggaatcc tttgaaacgt gccatgtacg 420
 attatagtcg aaaacagcaa tgttctgg 448

<210> 152
 <211> 263
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-F10
 <400> 152

ggtagcagtt gtacattcag catcatcaaa tgccaaaggg aggaaagaaa gattcttcaa 60
 agaaagaagc cacaagtaaa cctgcagcag cagatgctac aaagacgaca gaaaagtctg 120
 gtccggaagc caagttgaag ggaactggtg caaagaaaca ataaaaagtt gactatgcat 180
 gttcctgtta tgttttgtga gttctgtttg atagtttcca gctattcttt tggtagttaa 240
 taaagagaaa attttttata ttt 263

<210> 153
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-F2

 <400> 153

 cggacgcatg ggcggacgcg tggggcccgga ccaatgtttt ttgcttcgcg gtctagtact 60
 ttagctagta gatatttaac actttcttgt ttaaacggtg ctattaaaag gagctttgtc 120
 atagaggcaa cctgcaaaga aacgccagat acttccaaga aagagtttcc cgccccaagc 180
 cacttttctc cgcaagcaaa gcttttgaaa gaagttcgta aaaagaagga gttttggtcg 240
 aaccctgata atgtgatcga gcgaaccccc gaagataaag agcgaataaa gcaaagaagt 300
 gaaaggggtgg tgaaaatgtt gggctgtgaa gttaatgaaa aggacaactt tgaagtaaag 360
 gatcgtgtga ccgtaggaga acttttagcg tccttggggc aaaaatacc cggttatccg 420
 agaccaaaaa tgggtcctac tgtgtttg 448

<210> 154
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-F3

 <400> 154

 gatgcccac ttatatcacg cagccaacta tcatacccaa gtactgcagt atgtcggctc 60
 ctgaagagta tgtacagcaa cagcaatgtg taaagtatgt ggctcaacaa gttattgcac 120
 ccaaacaatg tgtcaagtac tataccgagc agaagattca aaaaagtat tgctctcgct 180
 atgttactga agaataagta caaagcaagc agtgcacaa gtatgtatct cttcagaaga 240
 tcaagtacga gtcatgctct gcccaatatg aagttcaaaa gatcaaacag caccaatgta 300
 ctatgacagt ctctgaacaa tacatacagc cggatacttg ctacacctat gttcctgaac 360
 aacaattggg gcctcagact tgttacaagt attattctgt acccaagttt 410

<210> 155
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F6

<400> 155

gcttttgttg gagactgcag ttgcatcctg ttgttccata caggttacac ttacactgga 60
aaggccatgg ttactacaaa aagaattcca ccatatcaaa cgtgccaaca accaccacaa 120
caaaaattgc tagacgtggt caaactcaca tagggaacca cagtttcaac ctattttata 180
ccaaggcttg ttttactaac ttgtcgcgta ccaatcatac tactaaaagt agcgaaagca 240
aggagaacca gccactagag tctctaccct attatcctta tttggatgag cgtggatttc 300
tcacttttca agatgattgg ggaaaagtct ctgtgtacgc tatatatgat gcaaaatattc 360
gtttacagta catcgggtatt tcaagagata cgcgtacttc cttgttactt catctcattc 420
ggatgcctgc gttgtgttat ta 442

<210> 156

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F8

<400> 156

ctctatatat atgtgtatgt gtgtgtgtgt gtgtaatcat ccactattgc agattgcact 60
agcgagtggg gtatcttctc ttctatcttc gatgacgggt tctcctttgg aggttattcg 120
aagtagaatt caagtccaag atgcacaaac cagaaatagt tatcgtggca ttgtcgattg 180
tatttcgaaa atgttgcgac aggaaggagc gttggcattt tacaaggga tgggtacgag 240
tctccttcga acagttccta gtggaatcat ctcttatcg agttatgaaa tgggacttcg 300
attggttcat cgagtcaatc tctattggaa tgcactttaa gatccctctt ccatagcttc 360
cttgtcttct ctttccggtt tcaaatagaa catttccatt tcttgggatt ccacaatctg 420
tacacca 427

<210> 157

<211> 419

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-G10

<400> 157

gggtccagcac gcgtccgcac agacttccgg tggtttcaac gaacatggtg aggactgtta 60
tcgttcgaag agactatctt cactgggttc tcaagtacag acgatttgaa aagagacaca 120
ggaatattcc agcatattgc tctccttgca ttcgcgtgag agaaggatac gtggttacca 180
ttggagaatg tcggccgtta tccaggacag tacgctttaa tgtgattaga attgatcgag 240
cagcacctgc agcagaagct ggaaagaaaa tctatagttc catataaact tgttgtttca 300
ctctattact catatcatga aaactgtgca cacttgggaa gcctcaaaaa tgatatgaag 360
tgagacgtac ttgggttgac gagtgtacca caaagttgtt gtaactagat actgctcgg 419

<210> 158

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-G12

<400> 158

cccacgcgtc cggtttatta ttggttgtgg taaggagcaa aatatgcaa aggaacaaac 60
atcgtcgtcc tccacaccac aaccaaccgt cagcaaacga acttttcac tagagaaaga 120
acaagagttg cgtttcgaag tatccaccga aaacaaagt caccttactc ttctatccgg 180
tacagccgaa gtctttggca tagagctgcc aaaagggaga cacgtggaat tccaagatac 240
caaactggca gtatttactt ggcacgggtg tgaattggaa cttgaaggta tcacagactt 300
ggaatatgtc gccagtgaac cacctatgca cttttatctc aaagcccact atctgctgga 360
ctgtatgcgc ttgcaagcta aacaacaagg aacgagagga cccaaagt 408

<210> 159

<211> 429

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-G4

<400> 159

gtccgtttct cgtctaaaca agctagtttt tcaagtgtc ttgatagtgc tcttccattc 60
ttcttatgcc caacattgga aagagtcact ggaacaatgg atacctaaag aaatggaaag 120

atcctttcaa ggaatattct ataatttga cccacctgga ggtattcctg gttcggtaac 180
agctgcagat tctcactacc agcctgacta ttactataac tggataagag atgccgctat 240
aactatggat gtcgttgtca ctctctatga aagagcaact gaacctgctc aagtaaaaaa 300
gttgaggat attcttaaaa gttatgtgca ctacaactat attatccaaa gaactcccaa 360
tccaacagga aatttgacga cgggtggcctt aagagctgct cattatcttc tcaatgggtc 420
tgcatttac 429

<210> 160
<211> 416
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-G6
<400> 160

ggttgtttga ccattggaca atccattatc tttgtgcaca cacgcgcaag tgccaacgaa 60
ttgaccaaga gacttcgaga ggaaggccat actgtatctt tgttacacgg aggagatatg 120
tcacctgaag aacgggatcg cgtgattgac gagtttcgac gtggaactac gaaagtattg 180
gtaacgacca atgtattggc acggggagta gatgtattac aagttaccgt agttgtcaat 240
tatgatttgc cactagatgt gaacaatcaa cctgatccag agacttactt acatcgagta 300
ggaagaactg gaagatttgg tagaaagggt cttgctatca attttgtgta tgatcgatac 360
agtttgaagc agttgcagga cattgaaaaa tacttgggaa actgtcatat agagaa 416

<210> 161
<211> 453
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-G7
<400> 161

cccacgcgtc cgccttataa cagtaccaag ggaatagatg gctatctttg gtacatcgtg 60
gcagccggaa gctttgtgat atggtgggtca ttccttgccct tgtttatatt caaaaacaga 120
tcgctattaa actatttgaa caatttgtac aagaagaaga ggaaagatat caactcaata 180
aagtagtatg gcacttgtat cattcctcta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg ccccccaaaa ggttcaaacc 360
 taacttacc ttgaatgcaa tttaaaaccc cttcaaaagt gcccccaaat ttcatttcag 420
 gggccttctt ttaaaaactt ccgaagggga aaa 453

<210> 162
 <211> 444
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-G8
 <400> 162

cgtttagttg cggagccatc ttttgcaaag ggtttgactg atggctttat gaaactagca 60
 aaagacgaag gattcgttgg tttgtacaag ggtcttgac cgattctatt caagcaagtt 120
 ccatatacaa tggccaagtt ttcagttttt gaaacagcgc aagaagttat ttacagaacg 180
 ttgagaaacg ttggctatcc tcgtgaaagc atgtctgagg gtatgcagtt agtggtgagt 240
 cttaactctg gcattattgc tggacttgct gctgcaattg tatcacaacc agcagatacc 300
 gtactttcca aaatcaatca agtaaagacc gaggggttcta ctgcaaaggc aatcggttacg 360
 attatgaaac aactcgggtg tcgaaggctg ttcttaggaa caggacctcg ttgtttgatg 420
 gttggatggt tgactgcagg tcaa 444

<210> 163
 <211> 269
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-H10
 <400> 163

gggtcgagga cgcgtccggt aaataaagca agcaaaggca tgagagaagt ataatagcag 60
 aagcatgctt gaagaaaaag aaagagattt cagaaaggga agaaaagtca gctatagaga 120
 acaaggtgaa ggagaactca acaaagaagg gaacaaccga acgattcaaa aaaaaacttt 180
 ggggggaaaa ggttaaagtg ggggttaaaaa acgtatcaag caccacgaat tgaacccccca 240
 aggtcgggtt aacaaaaccc aaggaaaaa 269

<210> 164
 <211> 243
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-H12

 <400> 164

 acgagtcacg gattagatag gtttagggat gatagagaat catgaagtag aggatgtggg 60
 gtaagagatt aaagaccact gcatgaggat aatgaatcta actgagttag gaaaataaac 120
 ttaagctact ttggctgggg aagtaaagcc taagaaagag taaattacgc aatcaaaagc 180
 atgagagaag tataatagca gaagcatgct tgaacaaaac atctagccaa gaaatatgga 240
 gtg 243

<210> 165
 <211> 483
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-003-Q1-E1-H2

 <400> 165

 gcctgcggta ccagtcctga aattccggga cccgtccgcc cagcatccg attgaaaatc 60
 atggtagaca ctaagcttaa ggacggtgct agtgctgctc tttggacttg ccgcctatct 120
 ctctatacag ttgtgttagc attttcagca acaataattg tacttgatgg aaggaaggca 180
 gataacatat ggaacgatgc cctatattat catggaaaag tggatgaactt ttgtgcatat 240
 tcggcttcgt ctgtttttga aggtggcgac catggcgcat gtaaatatgt gatggctttg 300
 gcttctatca gcttgatctt agttttcttt ctttggttgg cctcctttgt cgacgcattg 360
 tatccaattc ttacaaagtt ctggtttgtg gagcttggtg tcaacatatt ccttactatg 420
 tggtggttgg ttggtgcaat tgtggtgact gcaaagcgac cttctagtgt tgttatggat 480
 gcg 483

<210> 166
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H3

<400> 166

tgtgaagact ttttcatggc acccaaggaa cgtagtaaac caaagagtcg ctcttctaaa 60
gccggccttc agtttccagt tggacgtgta agtagattct taaagaatgg aaactatgca 120
gaaagagttg gagctggagc acccgtgtat ttagctgcag ttttgaata tttgactgcg 180
gaagtgttgg aactggcagg caatgcagct cgtgataaca agaaaacccg tatagttcca 240
cgtcatattc agttggcagt tcgtaacgac gaagaactta acaagctgtt gggcgggtgtg 300
actattgctt caggtggcgt tcttcccaac gtccatccca atctgctacc aaagaagaag 360
gcaaaggaag acatgcagta aagtttgctt tgagctgggtg tttttgaaca ccacctttac 420
aagaaacttg tcac 434

<210> 167

<211> 450

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H6

<400> 167

cacgcgtccg cggacgcgtg ggggaagcaa agaaccttcg agtattagtg ggaatgactc 60
cttccatgag atttccacgg gtaagtggga agcaaattt ggatctattg gatagcgacc 120
gatacaagtt gagtcgtcag tttcaaattg tacatatggt tggaagaaa catacggaac 180
agttggttgt aagcaagaaa cggaataatg tacataagct tgtattggca cgcaaaactt 240
atggaagtat tcaatggaaa gtggatattt cgaggctcgt ggtagaacgc ctcaaattt 300
taggtactgt ggttttgaat agtacctttc cagtttcctt ggtagacaac aatattcatt 360
ctgaacaagg aatagaaagc aacaagcaaa cggagataca attgacggaa acatttacta 420
ccaaaaatat tctttctgca gccattagta 450

<210> 168

<211> 337

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H7

<400> 168

acgtaattca acaacgtatc ttgaactcaa gtttcgaagc tagttaacta tctgcttggg 60
gattttctgt acagattggt ttggagggtt cttcctcttc acttgcataa ttccatttag 120
aatctgcat atgtatttta cgaaggatag tatcgagatt ctttcgataa ctgccatgac 180
catcaaaagt tggacagatg gttgatacgt tgatattttc aactctggga cagtcaattt 240
ttctcattcc tgcaatatgt ttcacttgag agaaagtctg atgtaggaga cccaaaatcc 300
agtcattttc gcaataaaca tttaccaatc gtctctgc 337

<210> 169

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-H9

<400> 169

cgtcgagccc gcatccggtc taaacgaatc aatcattcag taacagctaa tctcataata 60
accaagatac ttacaaagac ccccaacatg tacatatttg tgggatactg attcttgtca 120
aaaatgaggg catataacgc tcccatcggt gagaataatc taaccacat aagccaagga 180
ttcttcccaa aagccttgaa gaaaaaaaaa ttaactgaaa ggggtgatca cttttacagc 240
actcagaaga ggggttttagc cgttgggtta atgtccggtg accgtgtgga tataactatc 300
acttgattcg tctactatctt aaaatatctt caaccgtgtc acctatttcc acatcaacgt 360
ctaccttttc aaactttctt aac 383

<210> 170

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-A10

<400> 170

cccacgcgtc cgacagaaaa atggtcgtga ggatccgtct tgcctgtata ggcagaagaa 60
accatcctat gtataagatt gtcgttgcag acagtcattg gcctagagac ggaaaacatg 120
tagaagcaat cggcttatat agccccattg cagcaacaaa agaagagctt gaaaataata 180

caaaacgagt tttgttgat gtagaaagag caaaatattg gatagctact ggtgcacaac 240
caacaaaaac ggtcttttat ttatttgctt tggcaggaat cttgccaatg cctccaaatc 300
cagttttatg gcagcaaaaa gcaatcgcaa gatatgaagg tataggagtt gatgaacttg 360
ggaaaccgat tagcaaggaa gctttagaag aacaacttga gaaag 405

<210> 171
<211> 407
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-A12
<400> 171

aggatttaag attcaaggat gagaaagaag ttattggtaa gcgtgggttcg agcacaaaaac 60
attcctattc cacccaactc ggatgggtgct tatgtagtta tttcttctcc gcaacaagac 120
tttttttagaa ccgaaagtgt aaagggagat ggggcggaag tagtatggaa tgctatggag 180
tttcccatc aagtgagtcc ggatacgagc aacttgactg cttttgtata tgtagaccaa 240
aatgtttcca aagaaaacgc tggaagagct gaagtacctt taaaccaagt ttttggggat 300
ggttctcaac tgggttggtta tccagtttta tttaaacaaa aggatgggtc ttggcgttct 360
caaggagacc ttacttaga aataagatat acaggtgatg actattc 407

<210> 172
<211> 292
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-004-Q1-E1-A2
<400> 172

acgcattccg atacgcgtcc gcggacgcgt gggcgccagg tttcatattt gtcgtttggt 60
gancanatca cgcaagatcg aaaatcagat tgtgtcgttt actgttcatg gaagagtaaa 120
aggactctac tctatctata agaagatgaa gcgtggtaga aagctaaaag aaatttatga 180
tttaattgcy ttacgtataa ttattcaacc acgaaatcca ttaaaagaaa tacaagcatg 240
ttacgatgta cgagcattag tggaacagcg ttgggttctt gtgggggtaca aa 292

<210> 173
 <211> 310
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-A4

 <400> 173

 cggggacacc cacgcatccg ggaaaagcgc catatcgga aaacagcagt tgatggccgg 60
 cttgaaccgt ctaggagggg atgaatacac acccaaaagc aagttagaaa gaatattaca 120
 agtcaagcga aagagaaatt tctcctctgc tggaatagat gaaaagaaag agtcggttga 180
 cctccctagc gtctcaagtg tacaagcttg tgaccttcaa ctaccagaa aaattcgcg 240
 taatcgaaaa ggcatgtttc ctgtgaagaa aacaatatta tcacaaggaa aaaagataag 300
 agctgatttg 310

<210> 174
 <211> 323
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-A6

 <400> 174

 aagagcacat tgaagagttt aaatcggtga agaagtttaa agttttcaac acagataaca 60
 tttggctgaa cttacgtgca gtcaagaaac ttgtgaaaga aggaaagatg gatctggata 120
 ttattgcaaa taccaagtcg gttggagatc agaaagtaat tcagttggag acagcagttg 180
 gttctgctat tcgatacttt gaaaacgccc gaggtgtaaa tgttcctcgc tcacgttttc 240
 tcccggtgaa atccacatct gacttacttt tggttcaaag tagtctttac accttgaaat 300
 ctggaactct tattcctaata cca 323

<210> 175
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-B10

 <400> 175

catttgttct gtaaaaggga ctggaagcga cgccatgtcc aaggtctttc gaacagcacg 60
aagagtatat caagttggaa atgaactttc tctaggtagc ttgttggaga gaaagagcgt 120
tcagaatata tattctcgtc gttactttgc tacggaaact gaacaacaac actcccatga 180
gcacaaaaag aggttgacgt ggagggactt tagggaaggc agatgcaact tggacgagct 240
tgctaattgac aatcgtcata ttggagtgtg tattgttctg tccatctatg ttgttgttgg 300
tgtcactcta aaaaagggtgt ttggtggaaa gaaaaagagt gaagacgcag tttcctcagt 360
ggattaaggc gagatggtag ctgcacaata aggcattact t 401

<210> 176
<211> 398
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-B11
<400> 176

gggttgggtga gccgctactc gctttgagtc tattcacgtc ctcgatttcg tcttgggtttc 60
cttatactgt cctaagaaaa aatcattcta ttaaacaata tcgtggagtc gcttcagaaa 120
cgtcgtaaaa taaagacaga aggcattggca ggggtgtcac gtgcaaagct tcgtcttatg 180
acagacttga ggttgatgaa gcaagagcct ccagaggggt gtagcgctag tcctttgagt 240
gacgacaact tgttcgtttg gggtgccact atttttggcc cccctgatac tgcttgggaa 300
ggaggtatct acactttgcg acgaactttt agtgaagagt atcctgataa accaccgagg 360
gtccgtttta cttgtgatat gttccatccg aacgtcta 398

<210> 177
<211> 405
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-B12
<400> 177

cggacgcgtg ggggaggatt cgaggagaga gacagacaga tggccaacgc tggtaagat 60
ggccttgtgc aagtcaacaa acatagaaaa gtaaagagat tgcaagaaga taatattttg 120
aatagagcac tatcacaacc aggagatgta tttctgtgct tttgcaacat ccagttgttg 180

gtgaatgcag aaagagctat tataggaaat attacttgct cagaaagtat cgaattgtgt 240
 cgtctattag ctggacatat agcggtttgg ttcatgaac atttgatga ctttcgtttg 300
 gaagctatct tgggagcact attgtgtact tgttattgtg agtggaagcg ttttgaagga 360
 gaattggggg tacaagaatg gaatgaattg gagaagatat cttcc 405

<210> 178
 <211> 353
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-B2
 <400> 178

ttcggcgtcg acccacgcga cacgtgctga ggatgaagca agttgggaaa agttgtggag 60
 aggaaaacgc gaggtcattg gatatacttt ggaagcagct ttacagaaaa cttgtattgt 120
 ggaaaaccag ttgagggagt ggaaaaagaa actcgatagt ctagcagaca attattcggt 180
 gggtagcaga gcctatgatg cgagaatgtg gtcattggac ctcacgcaa ctattatgag 240
 tgtctgtttt gcagtttttg gaatgttttc acaattcttt gggtattatg tccaattgcc 300
 cattttacat atgggaaatg cgagtcagta ttacttttaa ggcgttatgg gaa 353

<210> 179
 <211> 459
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-B3
 <400> 179

ggtccgacat tcacgggttc ttgtcttttt ttttatttta tttttttttt tttttttttt 60
 tttttttttt tttttttttt ttcccccca aaatccaaaa atccgatgga aaacttgctg 120
 gaaaatgggg tccttaacca cctaacttgg ggccctgtt gggaaaattt aaagccccc 180
 aaaactttac gggctttcca atcagaaaaa tgaacggttt tattgaggcc cctaattgact 240
 tggatgctgc caaaaaattt gaaagtaact attggagagg aaaattgggc gcccaaggga 300
 aaactactgg ggggtattat taaaaaactt gtccccaaaa aaatttccgc cggattgttg 360
 gattttgggg agggaaaaaa aaaaaaacg gcggaaccac ataaacaaaa acacaaaaaa 420

aaacaaaaaa aagaaaaaaa aaaggggggg cccccaaa

459

<210> 180

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B5

<400> 180

gatagcagta tggcacccaa aggatccaaa agtgtaccg ttgctggaaa aaagcccatt 60
ggtaaagcag aaaagaaaaa agccaaaaag aagcgtgcag aatcttacag tatttatatt 120
tacaaagtgt tgaaacaagt ccactctgac actggtatat cttccaaagc aatgagcatc 180
atgaattcct ttgtcaatga tatatttgaa aggattgctt ccgagtctag caagctggca 240
gcatactcaa agacaaaaac tcttacttcg agagaaattc aaactgctgt acgccttttg 300
ttacctggag agttggccaa gcacgcagtt tcggaaggaa ccaaggcagt tacaaagtat 360
acttcttctt gaattcaagg ttgataaata gactagcgta caagtgtttt tgtgtgtttt 420
gaaaagtttg 430

<210> 181

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B8

<400> 181

gatgatttta tgtccttggt gtagtagtaa tgtctaggct tggctaattg tcgccagtaa 60
cttgtcttcg tcgttcttct tattattatg agtgaaaagg tggagaatgg tactaataac 120
gagttgttag aaaaaccgag ggttgtgata tttgggtgctg gaggcgtagg tggttatttg 180
gctgccagac ttgcagagtg tggacgtagc tttgttcacg tcatcgccag aggttctcac 240
ttgaaagcta ttcaggaaaa taacaattgc atcgttttta aaagtatcga tggtgactgc 300
acttcccaat tggatagcat cggggaggac gcacaaagtg tgttgaacac tgcgacaact 360
cccgtaaatt ccgtgatatt tacttgcaaa atggaccagt tggctgctgc agc 413

<210> 182

<211> 407
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-B9

 <400> 182

 gagggggggg gtttcaactcg tgtgttttct cttgacaaaa ctcgaagact atttatttct 60
 tgttatgttt tagagggttt tctagagtgt gtttttggag ttgttggtact tccagtcttg 120
 gtggttggtg aatggctcta gtgacaaaga gaagagggtt tgtcactttc ccgccattct 180
 ccacagcttc aactatcaac ttgtatacgc gcacaactac acagctatat taatacagag 240
 ttgtggtgta ataggcggca atttgagtgg ttgaaaagga ttggtgaaaa gtagaagact 300
 agtgaagggtg ttagagaaaa ggtccttgta tatttgtacc ctctactaac tatttcctct 360
 tgaagagatt tcaagtttgg tgtattcgac aagagttgca agtgta 407

<210> 183
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-C11

 <400> 183

 cgccaatcgt gcctgcacta gaagatgaat ggcattggctg tcatctgcta gttctgaaat 60
 atcgcttggt tgaaccagaa gttccttaag accaagcatt tctgatgtga atgattggat 120
 attctttcca agcagcgttt cttcctggcc aatactggta ttagatgctg aaccgctttg 180
 ggcactcgaa gaatatgttt tttttgatac tattggtgat aatatggagc ttggaatgtt 240
 tttcagagcc cttgttccat atacataagg ttttccttct tgcgtactt caggaaagtg 300
 gtacttgaga ttcttgctat ggaagcgttc catccaaaag agtgctgccg gatccattgc 360
 aaaagaggag gatgcttcga gctcttctgc ccatgctcta atc 403

<210> 184
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-C12

<400> 184

caggaaacaa ccaggaaacc gctgttttca tcgcaagaaa aggtttttatt ctcccaccaa 60

cgactggcga ctttgggtta ggtgccaaagt cgacgaacaa aagttgggcc taactccaga 120

actgggaaga ctagtaaata gttttgcagc agctccagac cctaaactta ggattcaaca 180

gttgctttac ttggcacaga ctttagagcc cctgcctttc cagtacaaga caaacgagaa 240

taaggttccc gggtgtctct ctactgttca cgttattggc gtctgtgaag acgataaaat 300

ttttttcaag ggagattctg acgcacagtt aaccaagggt ctacttgctt tgcttatcaa 360

gggtttgaac ggttacacag ttgaggagat tgaaagagtt agtccgaa 408

<210> 185

<211> 296

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C4

<400> 185

gggccagcca cgcgtacgca cacgcgtccg gttgaaaaat acttgcgag gtttttccga 60

tcccaattcc gctcaaattg cggttttattt gggtaattg catatgatcg cggaatgcat 120

gtggcatagt acagaaactt tgcattccgg agtctataga gaaactgaac aattaacttt 180

gagtaactgg tttgcaaaag aagaagaaga ataaagttga tatcgtcgtt tcaaaaaaaaa 240

aaaaaaaaaga aaaaaaaaaa gaaaaaaaaa aaaaaagaaa aaaagataaa gaaaaa 296

<210> 186

<211> 363

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C6

<400> 186

ggtccgtaat cacggggcca cgcacgcgtc cggtagaga aagccaagtg aggaaaagaa 60

ggcaagtaga aggcggcccc agaaaggaga gggcgtaaga cgtgatacag agtaggaaga 120

aaagagaaga gagctagaaa ggaggtaaaa gaagagtaaa aggactagaa gaggtacgga 180

attcacgagg aaggagcgtg aaggaaggag gaatcccaag taatcgagga agaaaaagct 240

tcggtgaaag cgtgaacgga ttttgtacac actgcccgtc aagttctgga agtgtgctaa 300
gaataagcac gggaaagtaa agagagtaag aaaaaaaaaa aaaaaaggcg gccgccccaa 360
aag 363

<210> 187
<211> 423
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-C7
<400> 187

aattgataag gttgtgcttt attggagcga gtgtttgtgt tgtgactcag ctatagagac 60
atgtatgtaa aagtaaaacg acacaaaaaa atttatttta ttttctgtga acccaacgat 120
tctatcgag tcatcaagac agaagtatcc aagttatcgg atattccagt ggaaaatatc 180
gaactatgga agaagatacc aaccgcccct gtaaatacac aagagcaacc acaatactcc 240
aagacaagtc gaggagggtt tcaaaggctg gaaaagaccg tacaagaaga aggaatagtt 300
aacggagaaa cgctctatct gacgtttgga accgacgact atacagatat tgaagtgcg 360
ccgtttgaac actaatcaca cagtctctgt ggaaaccctg ctatggaaaa aggcacatct 420
gag 423

<210> 188
<211> 222
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-C8
<400> 188

ggggccagca cgcgtccgca aacacgtccg attccgtctt gtggtgtcaa ggatgacgct 60
tgcacgttgg taccgcgcct tttccactgc gtccagttct gtaagaaagc taccgccagg 120
tttcgacaag gcagcttccc ttccgaaaga acaccatgct catgaagcag aaaagtggaa 180
aagactttcc cttgcctttg gtttgggtcgt tgcaggtggt gc 222

<210> 189
<211> 405
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C9

<400> 189

cccacgcgtc cgcccacgcg tccgtaacaa tattcctgcg aggccaagtg gacatagaac 60
agaaatacca gcacgtccat cttcatcgac aacaaccaca ggaggaggaa cagcagctta 120
tcatttacct cactcacctt attatggcaa tcctttctat tcagggccat tctcttctgc 180
cgttcatcat agcaactttg gtccgttttc cgtttcggcg tttggtcctt ttccttcggt 240
atttggaactg cagtttactt atcctcctcc tccttctcat gtatcctccc aaaacgggtgc 300
ttctgtagct gaaggtatga cagaagaaca agccaatcaa gcctttgttt ctcgtttggt 360
gcttgtaatg ggtttactta ttatattatg tcttttattt gtgtg 405

<210> 190

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-D10

<400> 190

cccacgcgtc cgcggtatgag cagcaacagc caaaccccaa aacgaaacac caaccagacg 60
gaaaaagtcg tcttggtgtg gtttttactg gacgcttgta cacacttgac aacagaactt 120
gcctttgtat accactcctt aaccacaacc gtggaacgag ccacacactg gactgccttg 180
ttgtggaagg aatatgccaa agctgatacg agatggggtc gttttcacga ttgtactgtg 240
gcgatggaag tagttacttc tctcctttgg ggctccttag ctctcttggt tgcctatggt 300
gtgtatagaa gagcagcttg gagacatttt tggcaacttg ttctttgtgt cgggtgaactt 360
tacggtgggt ggatgacgtt tggacccgat tggttgacaa gttttg 406

<210> 191

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-D11

<400> 191

gaattctctc atgtcgtggt tgcgtcgtgg ttattcaaga ttgtgggttc gtagtttatg 60
tagcaacaat cggaatactt ttcgcgagga atgggaacat ttaccgcaac aagaacaaga 120
atggaaaaga gcaggcaata cggaaaaaca aggttcattg ggagaaagaa aaccctaccc 180
tttgaagcct cttgacttgg acaccagatg gagtcttggg agcttgaacc gtgccatact 240
cataggatat gtgggtaatg atccggtgaa aagagaaatt tcttcgagca cggtcgcttg 300
gatgtttccc ttcagtaccg cttacaagaa aagaacggga gaccaagaaa caatcaccga 360
ttggcacaat gtgacagttt atgcctctcc ttctgcaaag tttt 404

<210> 192
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-D12

<400> 192

tgctaggctg tgcaaatgtc tcgttattcc atcggcgctg acctcgtgtt tctattacaa 60
cgcagtgatg aagatgcaca agactggatg cgacatcgat tgtacgatcc atcgacaggt 120
gttctttatc atcccgctcta ttttccacct ccggcacatc gcattcctta tttgcaacga 180
cgaatggacg atcaggaagc ggtgatgcaa aagcgattgc aacaatatcg acaaaatact 240
ttgccgctcg ttcatttttt ccaagtgagt tgatgtcgct tcgttggtgt tgttttttat 300
acacagttat cgaaacaaaag gacaaattgg tgtggataga taccagtaat aagagaccga 360
cggagcaagt atttgaagaa atctgtcaac atgtggaaag a 401

<210> 193
<211> 349
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-004-Q1-E1-D3

<400> 193

cgtccggcaa caaagagcat gtcgtccggt ctagacaagt cgttggagga cattatcaac 60
gaacaaagaa agaacaagac accgggaaaa aggaatgctg gaaaagggtan aaagtttgct 120
gccgcttcta aaaagctttc tgtcaaggga aagattggaa agaagagaat gggaaataag 180

atgaggatgg atgtcgacca agagacgaca agtggaaagc gttggaagca cgataagttt 240
 caagctagtg gtgggtggtag tgctccaaag agtcaagtaa ctctgtgtcca agtcaccaac 300
 ttggcactcc gtgtgaccaa caaggatatc aacgacctcc ttttctgaa 349

<210> 194
 <211> 85
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-D4
 <400> 194

catccgtact cattggcttt taaagcgctg ttgcctgtat cttaacagga tgcattggcg 60
 aatcagaaaa tagtttgccg aaaaa 85

<210> 195
 <211> 259
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-D5
 <400> 195

ccacgcgacc gacatactc cgttggcgct taggccgtgg cgtgggttga catgggggtac 60
 tggtaagca ggagtccttg ggacacacgc tatgtccaca agttcatacg tttgtagcgt 120
 gtgagtactt gcaatgacct ctctagtacg agggacgcga catgacttac cagcccacaa 180
 accaacatat gaccaactgg tggtcgaact atctcaactc aaggcggatt tattcgcaga 240
 aagacacaag ccgaaaggt 259

<210> 196
 <211> 79
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-D6
 <400> 196

taacagttcc caatagcatc atggaaatga ttggcacggt aaccttttca gaaagttgaa 60
 tgacaaggat caaaaatat 79

<210> 197
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-D7

 <400> 197

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 caaagtaacc ttcgagtagt ccaatcttct ttggtggcaa gctttgtcct cattctaagt 120
 ataatctgtg ccattcatgc agtaacagcc gatgaaataa caagtttcga gagaggatac 180
 caaacagttg caccaactca gacgcagcaa tgtcaaaaga tttgtgtcac cgccacacaa 240
 actcaagttc aaagttgtat ttatactcag acacaggctc tgttcatgtc tcaatgtgtc 300
 acagcattgc caactacctg ctataaatac gtaacaaaat ataagcaggt gtgctg 356

<210> 198
 <211> 242
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-E10

 <400> 198

 acgcgtacga aaacagatag agaataaaga actgaagaga aaagccgtac tgaacaccga 60
 cacaggtact cgaggagaaa tgagactcac gttaatgtga gagattggat gataaggatc 120
 tatgcagaag gatatggat ctgcggtata tcatatgaca catgcagcac cgactgttta 180
 tcacatacat agcactctgc atataagata aaatggtcag tagagattgt gcggcctgcc 240
 ac 242

<210> 199
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-E11

 <400> 199

 attggTTTTT gggcatttgt agaagcgttg gctgttgcac aaagagctat gtcggaagag 60

tcagacaacg aaggcgtgga gatcaagtta gagactgcac ctcatgatcc tcgcttccaa 120
actactaatc aagccaagca ctgttggtcg agatacatcg agtatcacgc ttgtgtgaaa 180
caaaaagggtg aagaggacag cgagtgtcaa aagtttaagc gatggtacaa gtcactgtgt 240
cctatggaat gggttcgtaa gtgtttttcc aacagcttat acttaagtga tttctaggta 300
gaaaactggg acgaacagcg tgccaacggg acctttcctg gtcccgtgta gttgtactgt 360
tccacgtggg cccttttgga gtttaactga cctgttgtcc g 401

<210> 200
<211> 405
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-E12
<400> 200

cccacgcgtc cgcccagtaa tgaggagtgg agtaaacaga aaaggaagta aaaggaggga 60
atgaaggga gttatggcaa aaacacgtgc cagcagcagc ggtaaaacgt gtgtagcaag 120
cgtagagcag aagaactggg tgtaaaggtc gagtagtaga gtaagtgtaa aagggaaagg 180
aaaggagaga aagaggaaag ggatgaaatg cagagatctc tagagaaagg caagaaagaa 240
aagaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaaacg gattaggaac 300
ccgtgtagtc tatgcagtaa aagaaagagg caaatacggg aaagcagtaa aagaagaaag 360
agaaaggaaa aaactgagta tcaggaagaa aagagggagt agatg 405

<210> 201
<211> 407
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-E9
<400> 201

agaaaagaga gagaagaaag aaaagaagag aaaagccgta ctgaagaccg acacaggtac 60
tcgaggagaa aggagacca aattaagggtg agagaatgga cgataaggaa ctaggcaaaa 120
ggatatggta tctgcggtag aacatatgaa agaagcagca ccgactgttt agcaaaaaca 180
cagcactctg cagaaaagag aaaatgtaaa gtatagagtg tgcggcctgc caaatagtag 240

agaagaaatc gatgaaagtg aaagcgagta aaagatgagg tatagagaat ggcggtccta 300
acggtaagga tccaaaggta gcgaagtaaa tagacgtttg aaaggcgtcc agtatgaaag 360
gagaaacgag tgtagcactg tctagtcgtc caactcagcg aaacagc 407

<210> 202
<211> 347
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-F1
<400> 202

gggtccacgc acgcgtccgg gcaattgaaa tttcgacatg ttttgacgct ccggaggga 60
catttcgtca ttttgataga ggttgatgc cgaaagtgc ttttgcagga atgatgcagt 120
atgatggtga aagtaaaatc ccgaaacact atattgtctc acctcctcat atcgaaagga 180
cccttgagga atatttggtg cataatggat gtcgacgtct ctccataagt gagactcaga 240
aatttggtca tgttacctat ttcttcaacg gaaatagagc aaacaaattt gatgaggaac 300
tcgaacttta tgtggaagtt ccaagcagca gagaaagaga aaatact 347

<210> 203
<211> 401
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-004-Q1-E1-F10
<400> 203

ggaatctttc gattttggtg aagtaatgat acatcaactt atacatacta tcgagtttgt 60
attgggagca gttagtaaca cggcaagtta tcttcgttta tgggcgctta gtttggcgca 120
ttctgagttg agcttggtct ttttagaaaa gggtttgtat aatacgattt atttacaaca 180
tccgatagcc attatgatcg gtttcttact ttgggcattt ttgactgtag gcgtggtgtg 240
tcttatggag tccctttctg cctttttaca tgccttgctt ttgcactggg tagagtttca 300
aaacaagttt tacaacttgc aaggagaagg aattaagttt actccaatat ccttttctac 360
ataaactagt ctctgttttg gaataaatgg ttgcaataga c 401

<210> 204
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-F11

 <400> 204

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 aaagttatga tgggatattt accaacgtat cgataacctg gagtgggtga atagttagca 120
 aaagacaatg tggaaagact gggttggtaga attgaaaacg agatggaacg acgcttttga 180
 aactatgtg agtcgcatgg tggaagagtt gaaacaacaa caccgattcc gtacagtaac 240
 ggaggaagaa agacaggcgt tgattcgtcc aattgtacaa gcatttgaag atgcttgga 300
 gagaattcgc aagatgatgg tagaagatgg ttgaatagaa tgaggaggga gacgagagcc 360

<210> 205
 <211> 310
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-F2

 <400> 205

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 ttgttttttg cggacacttg aagacagttg gaattggata aaagatacga ggggaccaga 180
 tacatagtaa agcctttccg aggagaattt tgtctgcaat actatgaaac aggtcatgac 240
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 atgaaagctt 310

<210> 206
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-004-Q1-E1-F4

 <400> 206

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 actcagatca tcaacttcag ttattgacgc aggcattgtc attgatggcc gtgagtagat 120
 atgctcttat tgtggtcgaa tctgcaactg ctttacatcg tacagactag acctgaagag 180
 gagaacttgc agctatgcaa taacatatgg cgaggtttct tcgagcactt caaaagctag 240
 cagatgaatt tgggtgttgc gttgttataa cgaaccaact agttgcacac gtagatgggtg 300
 gtgcaatgtt tgctgtcgat cctaagaaac ctattggcgg aaatattatt gcacatgcct 360
 ctcaaacgag gttatatattg agaaaaggaa gagcanagaa tcgcatatgt aaaatatatg 420
 attcgccctg t 431

<210> 207
 <211> 396
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-F6
 <400> 207

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 tatgctcagc aaacccaaca acagcaacag tgccaacaag tatgtaaaca gtatgcatac 180
 tatcagagtc cagtctgcac ttccgtaacc acacagagcc catactggac ccaatgctcg 240
 aagactgtgc aaacctttgt cccaagccag tgcagtactt ataccaatc tcctacatgg 300
 acctattgca gcacctaaac caccactagc gtaccatctc aatgcagcaa gggcgtgact 360
 acctatactc aaacctgctg tgcttatgcc caacaa 396

<210> 208
 <211> 274
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-F7
 <400> 208

ccacgcgtcc gcacacgcgt cagcccacgc gtccgcgaag ttacaattct cggggcggct 60
 cattttcaaa taatggacgt tatggctacg ggaatcatag caataatttc ggaaggagcg 120

gatagcttct aataaaaatt agtatctagt tattcaaaaa aaaaaaaaga aaaaaaaaaa 180
 aaaaaaaaaa taaaaaaaaa aaaaaaaaaat aaaaaaaaag taaaaaaaga ggacaaaaaa 240
 acaacaaaaa ttcaacataa aaagtcaagg ggat 274

<210> 209
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G11
 <400> 209

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 agcttgttct gtctcacgtt tcaagcttgc tttttggctt tctcttatgg gccttggtga 180
 gaaagagttg actgaagggg ttgatcactt ttacagcact cgaagagggg tttagccggt 240
 gggttgattt ccggtgaccg tgtgatataa ctaccacttg attcttcgag tattgaaact 300
 atgaaaaccg aaacgaatgt ttcctcacga acttctacgt gatcttgctt tctcaactca 360
 tcgcctgcat ttaaaagcac tccttgtaaa ttctctgga ac 402

<210> 210
 <211> 241
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G12
 <400> 210

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 taaaagggcg gcagcacaaa taggttaaac atttagattc acctgcaggc gacgtcataa 120
 ctcttctaata ctgtcaacta aggttcagtt ccatggtcgt cgttttataa cgtgcttact 180
 ggtaataccc tggcggttgc catcttaagc gccttgcttc aaaacaccct ttcgcctcgt 240
 g 241

<210> 211
 <211> 422
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G2

<400> 211

gaacaaactg cctaagcata gttaacttaa tatcagaaat acaaacgaac tgccttagtt 60
gtgatagaat ttcgccaagg agaaggatca aaacaacca aaccacctag ctgaagtatc 120
tcttggaac agagcttcca atacatgcag gaggacggcc ttagcgcaag cagtcacaga 180
cctcgctcgt acccagtaaa ctgcgaatgc cagactctag agatagagca cagtccttac 240
tctccatatc gcacacacaa ctagaacctt ttctcattcg catggaagtt ttgctctggc 300
acgtgacgac ttgtgcagtc cagcacgaat ttgaagctct ggtttcatcc atgctttttt 360
tgggatagaa tggataacta gaacctttac tcattcgcat taaaccttca gatgtcacgt 420
tg 422

<210> 212

<211> 343

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G3

<400> 212

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atgctttgga aatagttttt gggtcttctg ttattcgaga taatttggat gcgactggaa 120
actctgctgt gtctatgtta ttattatctt ctgcaatgtc tgctttgggt tctcaagctg 180
gtttaggttc tagtccagca ttttcacttc ccaaatatga gatactatca ccagttgtgg 240
aacttccgct atatctttta ttgggtcttt tagccggttt ggctcttttg gggttgaaat 300
attctttgca gttgggaagt aacttttttc aaggcaaatt gtc 343

<210> 213

<211> 182

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-G5

<400> 213

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 ttagtaagat cgcacaggaa cagtcactgg ctgtacatcg ttacgatcc gtgctagtat 120
 gagcgtttcc caggattgta acgagagcat tccaaggac tgaggcgact acaatcgaaa 180
 ac 182

<210> 214
 <211> 315
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G8
 <400> 214

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 caatcatcaa agctgtcggt acttgcttcc accaagttct ttgctctaa ttgtggcagc 120
 agtgacagct tgaatgactg cagtgcgaaa gttgtgcttt tccagagtag aagttccgtg 180
 aatagttgtg ccaccccgga gatccagtgg agtggaagt tttgccggat gttcgggtgcg 240
 acgaggagcg acgtttgctg caccctaaac tgtctgagt gctagagaca atggaacatc 300
 cccaaggtaa gccac 315

<210> 215
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-H11
 <400> 215

cccacgcgtc cgggttttca ggggaaaagc aaacaagaat ggcagtggat tggagcagtc 60
 gtccttgcac ttggcagagg ttatgtattt tggttgtgct tttttgtatt gtgttccaac 120
 tggtagacag taccacaaca aagcttgtca agattgagaa actggatcgt actattgact 180
 tgagcaaaag ttacgtaaca gaaaagggtg tgataaagct gaacactgca aagtgggacg 240
 cattcgagct ccttgttcct tttcaacagt atgaagaaag tcttgacat attcatgtgg 300
 aagattcatc cagtcgtgca ttgcaagtaa aggagcaacc agaacgggat gtattgtatc 360
 gcaaactggt cgtccttcca aacgcttcta cctcggtcag tgacac 406

<210> 216
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-004-Q1-E1-H12

<400> 216

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 gtgcatcgaa tccaaggtt tcgactgtta ttactggagc taccaagttg gaacaattgg 120
 aagagaatTTT tcgagctata caatttggtc caaagttaac tgcaaagaaa atgaaactga 180
 tcgatgaaat aactggaacg aagcctgact acaatgcgga aatgaaaatg gcacgtcgca 240
 ttcgaggctt ggaacgatga gtccacacaa gaagaaaaag agggttggga aaagacancg 300
 atcgatgggt gtaacacaac tagttattca tttattcagt aaagtatcga tactgctgtn 360
 accgaaaaca acaacaactc cctaaa 386

<210> 217
 <211> 319
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-H2

<400> 217

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 caccaaaca cgtcgcagaa ataagaaaag aatttcttcg taaagcaaaa agagttcatc 120
 cagacaaaca aagacataat gaacgtgcc aatgaggagt ttgtcttttg aaagaggatt 180
 atgaacgtct cgtggaggca acccaaagca accacacaac gagtagaaac atacttgtgg 240
 aacacattcc cttggaaaag tggaagagaa caacgacatt gcaagaaatg gacaataaca 300
 actacgcgga caatcatca 319

<210> 218
 <211> 253
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-004-Q1-E1-H5

<400> 218

cgctccgcaca cgcgaccgaa aggtacttct catagagccg ttctagtaac aaacttgagt 60

ccagaaacca aggaagatag tctggaagat tttttttcgt tttgcggaaa gattacaaat 120

atcaaagtcc gagaggcgca acccccaagt gaagaacaag aaggtcaaca gatacccccc 180

tcaaaggaag caatagttgt cttcgaatcc agatctgctc agcaagttgc tctgttactg 240

aataatgcgg tgc 253

<210> 219

<211> 357

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H7

<400> 219

gtccaggacg cgctccgcca cgcatccgcc cagcggtccg gactgcaagg acaaagcttc 60

tccaaagaaa atcgagagt atacaattcg tacgttacag cgtactgtgc cagctgccgt 120

acctggcatt gtcttgttac caggtggaca gtcagaagaa gaagcttccg tgaatctcaa 180

cgccatgaat caagtggaga tgatcaagcc ttggaaactt tccttttctt acggacgtgc 240

tttgcagtca tcatgtcaga aagcgtggca aggaaaggca gataatgtcc gagcggcaca 300

agaagccttt ttagctcgtg caaaagcaaa tagtgaggct actttgggggt aatatgc 357

<210> 220

<211> 118

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H9

<400> 220

tgatgcctgg ctttcacaca ggagaccggg gatttagccc cggcaccggc atggccagac 60

ctttgtgaac acgcagctgt gtccagatgc gggcagtatc cgcaccacc tgttctgt 118

<210> 221

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A1

<400> 221

ggtgttttgc tcttagatg aagctttag agcttgtcga gagaaacaaa atgagtattt 60
gggatggaaa aagatacgtc ttactccggt catatgagaa atgagcaacg acggccaaga 120
ggagcaactt ggtcgtggtg gtgcttctct gcttccaagt gccaaaagct tacttgtacg 180
cgaagaaaaa gaacaaacag acaaacttgg actctttccg acgttggttt tcttggcact 240
tacaccagaa actagtcaac aattggcaga ggtcattggg agtcagttga aaggagatac 300
ttggacactt tcttttcccg tagtggacta taaccagacg ttgctaccat caagtaggaa 360
caatgataag tatatagact cgtctacgtt tcattcagat actccaagtg cgt 413

<210> 222

<211> 388

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A11

<400> 222

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ctgaatgtgt ttttgttaac actggaataa gaaacagctt tagaaactta tgggaaaagg 120
ttcagccacg agaggtcgtt acaagtacga gttgtggcct gcgaacaaca agtttttttg 180
tggaggaaag ataattaccg gtcccgaacta taaaaatact tttgcgacac tgttgttggg 240
cattatcccc ttgggactgt attttgggat aactatttcc tatctgacta cgcattggag 300
agcaggaggc tatactttct tagcacttac catattcctt gcttgtgtgt ctataataac 360
tttattgtta actgcaacag acgaccc 388

<210> 223

<211> 468

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A2

<400> 223

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gttggtttttc aaagcaaaga caactgtggt ttgcacctcg cagttatcgg aggagtgttt 120
tagtcagtga aaagactgcc tcgaagagat gtgtggcttg cgtagatatg ccagtcctaaa 180
agtcttccga aaaggatacg cggcaagctg caaaagcaac ggaccattcc tatgctagtt 240
tggaagccaa ggtgcttata gataacgaaa aggactttta tcacactggt atctcccttg 300
agtggtaaga tagaccaggt ctttttgaag gacttgacaa gttgggtccag aaacagctgg 360
gttaacagta tgacgagtct tggcgaaaaa cagagaaaca actagcacta gataacttttt 420
tcgtcacaga tagcgggttcc aaaatttttag aagaagattt tgaaaaga 468

<210> 224
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A8

<400> 224

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cgtctttaca catacacaca cacacacact aacacgtgca aggtttcttg cgggaaagta 120
cttgcgacaa ctagagtctt tactacaaag ggaaatgtga gagcgttggg aaagtttttag 180
tagacttggt cgcgtattgc gtatgatagc caacctgttg tgtcagttgt atgtatggct 240
ttagacgaaa ccttggtgaag cgagagcttt tctttatcgg acaaggcaat tgtaccgaga 300
aaacgacttg tgacaacctg actcggattg actgacagat attcgggtctg gcgggttttg 360

<210> 225
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B12

<400> 225

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gatcccggaa tggttaaaat cttggcgggt taccgttgat attgaaagaa ataccttttg 120
atataattga gtttcactt tatgaatatt tgaagaaacg atggagtgc aatagcaaca 180
acaaggaacg attggagact tggaaaacgg ctacttggtg ttgtattgct ggtgcagttg 240

ctgcagctgt cacaactcct ttggatgttt gccaaaacaa aagttatggt ggtacaagga 300
gaggcgaaga atagcagtgg aattgcttct actttgataa agattgcgaa agaaga 356

<210> 226
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B3

<400> 226

gggatgcagt tcgagggcta tcgttacttg tagtcagtct tactgcaata cattccttca 60
tgattggatg gctgttgaag ataaagaata ctagcggact taggttggtta tttcgagaag 120
aagatgaaga cattggtgcg gacaacatca tcgtgttcgg aaggagacac tgtattcatg 180
aatattgcaa aatatcttcc gttttattaa aaaacagaga gtcgtttctt ggccttggtta 240
ctgttttgga aacaataggt gacaacgaac aattcacttt gttggacaca actggaaaaa 300
gaagattgat aatttgtacg tatggagggtg tgtctagtaa gagaaattgg ccttgtcgcc 360
cagaccttgt gaagggaatc gttgctaaaa tgtcacaact aactgga 407

<210> 227
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B6

<400> 227

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caaaacttca agatggtggt agtgcttctc tttggactgt tcgtctcttc ctctacacag 120
ttattttagc attctctgcc actatcattg gcttggatgg acgtaaagca gacaacatat 180
ggaacgacag cttattctat gatgggaagt acattaactt ttgtgcttat tctgcctctt 240
ctgttgtaga aggaggggac catggagcgt gtaaatatgt catggcggtg gcgtctataa 300
gtttgattct agtctttttc ttgtggcttt ttacatttgt agatgcgttg tatectattc 360
ttaccaagtt ttggtttatt gaattgggta tcaacgtgtt tcaaacaatg tgggtggttg 420
ttggagcaat tggtgtatct gcaaa 445

<210> 228
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B7

<400> 228

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cccacgcgtc cggtttttggg aagacgagga atggaacaac tttctttcca agtcaacgag   60
ttattacagt cacgaagata tgatccagat atattaccag acttggaag atatgtagaa  120
gcgcagtgtt tagaaggagc atatgatggc gacgcgaatt tagcttggtt aaaactttat  180
caattttatt ctgaaaaaac aaacgtttct attgtctcca agatattatt gaaagccttg  240
gcagcacttc ctagttccga ttttgtgagt tgtttgtact tactttctga gaaaatccaa  300
cgagaggctc ctatatccac catcataagt tgggcggatg ctttagaaac tggaaagttt  360
gtagagtttt ggaacagttt acacaacat gaagagttgt tgaaaggctt gccaggaata  420
gaagac                                           426
  
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<210> 229
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B9

<400> 229

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cctcgtagct catgcagttc ccgttggaag agatgcattc agtttcagtc agacttttgg  120
aaatgcttct gcttcaggca acgcctctgt tattccagct acaaccaaga tccccaagtt  180
agaagtaact agtagtcct catcaaagga caatggaaaa gcagctcaag tagactttgc  240
agattactca aagggatatc ctctgcctag ctatttttac gctccttctt acacatccta  300
tgtggaattt cctcaatatc catcctatcc atcatggcct tcttttaatg agcagcctgc  360
ctttgggtggc ttcgatccca atgcagagtt tggagagtct gaaattttcg tgtgatggaa  420
acaaattgga ttccctacac tgagtt                                           446
  
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<210> 230
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C1

<400> 230

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 tctctgtagt atgcttcaaa gcgtggaagc tccagttcgt ggaactgggt tgagaacccc 120
 cggtggagag tttgttactt tgaaacccaa tcaagatgag tttagtcgca ggacagctgc 180
 attgctggaga atggtggaac agagacaagg tgcaggcagt tccgactcgg agacaggtaa 240
 tgtcgatgac gcaagtaggt tgccaactgt caaagacagc catgacgaca atgaaaatta 300
 tcttgtcacc ggcaagcaag aatcgaagaa ggacgaagaa acggaggtga taggaaatga 360
 atttgttgag aataaatcct attatcaaga 390

<210> 231
 <211> 468
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-005-Q1-E1-C2

<400> 231

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 tatttgaaga atactatcgt caaaatacaa gtgtttatta tgaaagagag cctgaaatcg 120
 gtgagcttgt gtttctagaa gggagggtcgc ttgtgaaggt agttccattt gctctacctg 180
 aaagtggcat ggatcgagat acaattgcaa aacgtttaga ggtttttaaag agaaactccg 240
 tgcaggaatc tagttctcca caaagaacag attcgcatac ctatcctgaa aaagaatcct 300
 ggcaaaagga gaaacatccg gtttcggaca gagagtcgag gatattctgaa aggtatgcac 360
 aagacgaaga ctgccttca gctccacac agttggnatg atggcaacct tgagttttca 420
 attancttgt aatttcacag aaataataaa tgagatactt ttactctg 468

<210> 232
 <211> 402
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C3

<400> 232

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gtcgtggtaa aggtggtaaa ggtttaggaa aaggagggtgc aaagcgctcat cgcaaagtct 120
tgcgagaçaa tatccaagga ataaccaaac cagctatccg tcgtttggcg agaagagggtg 180
gagtgaacg aatctcagga cttatctatg aagaaacacg aaatgtcctt cgtgttttct 240
tggaagtgt tattcgtgat gcagttactt atacggagca tgctcgtcgc aagacggtaa 300
ctgctatgga tgctgtatat gctctgaaac gtcaaggccg caccctttac ggatttggag 360
gataaagcct gcttgaacaa aggggtgtttc tcaacacctt tc 402

<210> 233

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C5

<400> 233

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gogactctag aacctttgta aacaacagag aggaggagga taatatccgt tgcctttttt 120
cccatacgta atcaacactg agtatcaaac aatctttttc ttatggctct gcagttggac 180
acgcacctta tgcggcagaa ataacaactg cagctgattc aagtcagtgg cttggctcca 240
cctgttttacg aaaagaaggc ggaaggactt ggaaccacca acattgtacc tgctgtaaca 300
gtttgtggct actgaactat tttaaaggat aagccaagcg aacttgtaac tctgtagaac 360
ggtttgggcc ttgaagcgag ataggattgc aacttgcaac ggcaaggatt g 411

<210> 234

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-005-Q1-E1-C6

<400> 234

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 gaaaccaatc accaaaagtg ataaaaagtc caaaaagaag aggtcagagt cctatgctat 120
 ctacatttac aaggtcttga agcaagtga tccggatact ggcatatcct ccaaggcgat 180
 gagcatcatg aactcctttg tgaacgatat atttgaacgt attgccagtg aagctagtaa 240
 acttgcagct tattccaaga cgaagacttt gacttctcgt gaaatacaga ctgctgtacg 300
 tctgttgctc nctggagaac tcgccaagca tgaagtttcg gaaggtaacg aagcagtaac 360
 aaagtacact tcttcgtaat acgtactttg aacatatggg gtttgtcaac acttttttgg 420

<210> 235
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C7

<400> 235

cccacgcgtc cgcccacgcg tccgggaaaa cgatcatgcag ttgcgtattc cttctgctgc 60
 agtcaaagca cagtacgtcg acccaacgca agttgttgtg gaccctgtaa gacatacaac 120
 aagtcctctt gtcactggag gttctgttgt aggaatacga tgttgcgacg gagtagttat 180
 tgctgcggat actttagctt cttatggatc gatggctcga tttcaaaact tgctgagact 240
 tgtaaaagtt actgacaatt gtttgttggg tgggtggtggt gaaatttccg actttcaaga 300
 aattcaacgt cttttagaaa acctcatcac aaaggacttt tgttttaacg atgagcatac 360
 acaaagcccg cgatcagttc atcaatattt aggaagagta ctctatgcc agag 414

<210> 236
 <211> 101
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C8

<400> 236

tttacaata agttttgtaa ggctaaggga aattggtttt gtacaagctc ccaacttggg 60
 aaaatttccc ggtgtggaac catccttggc ttgttaacca a 101

<210> 237
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-005-Q1-E1-C9

<400> 237

 tccacccacc cgtccgcagt cgtcaggaat tcctagtcgg tttggttgac atttggtaga 60
 tatggcaact gcagtggaag gaaaacaaga aacagcaaag gacaccaagt tgaagaaggc 120
 ctttgacctc aagtcattct tgaaggacct ggcagctgga ggtgtagctg gggcaatctc 180
 caagacggcg gtcgccccta ttgaaagagt gaagttgcta cttcaagtgc agtattcaaa 240
 tccgcaaadc ccggaggaga aacgttataa aggcatcatc gactgtttta caagagttcc 300
 aaaggaacaa gggtttatct ctttctggag agggaaacatg gcaaacgtca tccgttactt 360
 tcctacgcag gcccttaact ttgctttcaa ggacaagtac aaggccatat tcttggangg 420
 agttgacaag aat 433

<210> 238
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-005-Q1-E1-D1

<400> 238

 cccacgcgtc cgcgattgta ttgaacctct gcttggagtt gtattatctg atgaacagaa 60
 aagattcggt gtcgacaatg cttataatac gagcgtaagt tctccagtat atgaggagcc 120
 acatccccct gtgactcttc gaagtacaga aggtttgaca caagaacaaa agcagttgag 180
 aagaatattg aagaatcgct ggagtgcaaa aatgtctcgt atgaaaagaa atgaacagat 240
 tcgcaggtta gagttcaagg ccaacgagca ggagagagtt atacgagaat tgctagaaga 300
 aagagctagc ttgaagaacg aaattgaact gctgaagaga caagtggaga agcaacaact 360
 cgatcctctc tgcggttcaa gtcagtaaata gagtataacg agcgacctga tatacg 416

<210> 239
 <211> 428
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D10

<400> 239

caagctactg cgggagaaca agtaccatc agtttcaagc ctgaccatta tactttgaga 60
ggaaagtgca tcggtatctt ttccaaactt gcctttgaaa atcgttccgt gttgggtctat 120
gccactagtc ggtgatcatc tcggttacgg aaattatctg cagtttttgg gttgggtggtt 180
tcttgtggcg tgtgtgggtg acgttggttac cgacgactgt gtgagagact acttgtactt 240
gcttcattct actagttgaa atatgacgag aggcaaccaa cgtgaggtag atagacaacg 300
agcacaaaag agtgcagaga agcacaaaga aaatgttcag aaagaaaagg agaataattgt 360
tttgaaaaag gaaagggacg ccgaaataat gcgccaaaaa caagcagcag ccatggcaaa 420
acagcaac 428

<210> 240

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D12

<400> 240

cacacgcac cgttttagga ttgaaggtca aatatctctg acaagggcta ttggagattc 60
tcatttgaag aagtttttaa taagcgaacc tgaggtgacg aaaatagaaa ggaaagactg 120
gacttggtac gaatggatta tcttggcaac agatggttta tgggatgtgc ttagtccgga 180
agaagtatct cacataatga agaagactgt ttcgaaagga gatttggtta caaacgtct 240
cgtgaacgaa gcgatagaga aaggaagtaa agacaatatc acagcaattg ccatatTTTT 300
gaatcaactc tgatattttc tcaaggcatt attgtttata tcagtgattg agcttttgga 360
ataagagtca ataatagcaa tactaaagtc accgtattaa aaaagtcttc aaagcttcat 420
ctaaaaaaaa aaagaaaaa 439

<210> 241

<211> 296

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D3

<400> 241

cgcgctccgct gtgcctgttg catctgcaaa tactgcacag atgcaagcta ttcagcaaca 60
acaatatgga ggttccggtg gcaactggaa ttttggtgct gcatatcgtc caccagagac 120
agactttaac atatccgtcg gttatcagca gcatcgaaca actattcaga tctcgatggt 180
acctgatgag tcagctggct acttgggtcc tggaggtttc acggctggtg ttggaccagg 240
caacttgggt ctttccttca acatcaacat ttagtaaact aggagcgttc catctt 296

<210> 242

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D8

<400> 242

aacaacaatt aggcactgga tgctttgggc agcattgttg tagttgcat acaagtgcaa 60
gggactggag atatattttt aacaagttga aacagtttgt ttttcattat gcatacagag 120
aaacaagagg aagattccac aaccaagtc aagacttttg aagacaaacc aaccaagaag 180
ataagcaaac cgaaaaagga aaaagttacc aaaagggaga taaagagtcc caataaaaga 240
aagcgtgctg gaagttgttt cattttgaag acgttggtta gactagtctt cctatagagt 300
ctacgaaggg ttccattgag tctcctcgac aaagacgcag gaaaacatct agcgtaaagc 360
caaagaggtc gaaaggaaga agagcatcca aggcaaccaa gtcttccaaa ggaacagtga 420
gtatccgtat gtgttttttt gaaaaatgag cgaca 455

<210> 243

<211> 403

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D9

<400> 243

gagtgataag gttgacataa acaacgctaa tatcagagct tataccaagt ttcccggatt 60
ttatccaaag ttggcttccc tgattgtgaa gaacggtcca tataagagcg tcagtgatct 120

ctataatatt aaaggattga cggaagaaca aaaggagctt atcaaaaagt atgaggatcg 180
 cttcgtagca ctcgatccag ctccagaata tgaagtggac aagtttaaca atggactata 240
 tcgttgaaac aagctagtct tttagcgtga gtttcaaggc gcattcttga cttgctctca 300
 ctattgcgca ataataaagt ttctcgataa aagcttggtg gtttaaaaaa aaaaaaaaaa 360
 aaaaaagaag aaaaaaaaaa aaaaagaatg agaggagaag agg 403

<210> 244
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-005-Q1-E1-E1
 <400> 244

cgtagtcatt tggatatccat tcagaaaggt gactacgtag tggtagcagt atatgaacct 60
 ggagtacagc gtctttatgc acatccaatc gctcgatcat ccaataagga atttcggaaa 120
 atcgaggaga gtaacgtaat tcaacaacgt atcttgaact caagtttcga agctagttaa 180
 ctatctgctt ggggattttc tgtacagatt gttttggagg tttcttcctc ttcacttgca 240
 taattccatt tagaatctgc gatatgtatt ttacgaagga tagtatcgag attctttcga 300
 tagctgccat gaccatcaaa agttggacag atgggtgata cgttgatatt ttcaactctg 360
 ggacagtcaa tctttctcat tcttgcaata tgtttcactt gagagaaagt tcgatg 416

<210> 245
 <211> 376
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-005-Q1-E1-E10
 <400> 245

cccacgcgtc cgcccaggcg tccgcccacg cgtccgcaa gactgtgttc ccagatgaac 60
 catctacggg aatggatcct gttagaccac tacgtgcatg ggaaatgac gatcctgcta 120
 aaacaggctc agtgatggta ttgactcatc actctatgga ggaagcggat gtcatggctg 180
 accgcattgg tagaatgtcg atacggatgt ttaggtgtca tgggccacct ctacatttgc 240
 tgaagaagtt tggcacagga tatcgctgtg tgagtttgtg taaggaagcc agatatgttc 300

gcacattttg attctcgaaa catacgcgag acctttcaga cagggatgaa ccgtaaacct 360
tcaagtataa gtgtac 376

<210> 246
<211> 250
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E11

<400> 246

gcgtccgcct atcgtctgcg aagatttgtt tcccagatga acatctacgg gaatgggtcc 60
tgttcgtcct ctacgtgctg gggacgtcat cgatcctgct gagacaggtc tagtgatgat 120
attgactcct cacgcaatgg aggtagcgta tgtcatggat gaccacgctg gtagaatgtc 180
gagcggggagg tttaggtgtc ttggggccaca tctacattgg ctgaacaagt ttgggtctagg 240
atatcgtctg 250

<210> 247
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E12

<400> 247

gtagccgtcc gacattctag ggtccaccga cccgtccgga acaatattcg ctgtcggcgt 60
cgaaggcagc caaacgagca ggaagcaact tgaaacatgg ggcgtatgca cagtaaaggt 120
aagggaattg ccagtcggt aattccctat aaacggaacc caccctcctg ggtaaaaacg 180
acaccgaacg aagttgtcga tatgatttgc aagttggcta gaaaagggtt agttccttcg 240
caaattggcg ttcattctac tgactctcaa ggtgttcctc tcgtgaaaca agttactggc 300
aataagatag ttcgcatctt aaaggcgaat ggattggctc ctgagatacc cgaagatctt 360
tactttttga ttaaaaaggc agttgcagtg cgtaaacatt tggaaagaaa taggaaagac 420
taagaatcca agtttcgttt gattctcata gagag 455

<210> 248
<211> 437
<212> DNA

<223> Clone ID: LIB190-005-Q1-E1-E7

<400> 250

gtagtcttt tattggctct tttatgcgta gggtctgctc tggctgctga attggcacct 60
ggaattgctg aaaaatcggg agagagagga tatgaggaac cctgctgtac cgaatattgt 120
tattgggaag aaatatgtat cacacccaca cccacaccta caccaaccta ctattactat 180
tattacgcaa gaaatgcaaa acaggaaaat gtcgagagaa gcgtagaaaa gagtatctct 240
tccgcagaaa aatctgatgc gggtcgaggg tatttcccca cgtactacta ttatgagact 300
cctacatatt attactatta tgagactccg acatattatt actagtatga gactccgaca 360
tattattact attatgagac tccatcccca accccgacac caacgcctta ttgtacctat 420
acccaaa 427

<210> 251

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F10

<400> 251

gaaggaggag gatatcaagc gtgacacggg atgttcttgc caagaatgaa atagaaggaa 60
aaaaaaagtt gtttattatt ctagccaaga agaacaatgg ttattgttgt accagaggct 120
aagtcatgat gggagattag gatttttggtt ttctttttct tgtcgtgaa gtcttctata 180
cagtgttatt ttgagttttc gacaaggagg acaacgaaga actcccaatt tgttgacaag 240
taatacgtga cagtcaacgg catagagaga aacactcttg ggtgatttgc tcgagtccac 300
gataccta atcgttcctc ttccgtcttg agaagtgaga taggtgagat ggtcaccttg 360
tgatagaac caagtagaag gatacattgc aggattgcat cggatacacg cgacacagct 420
gga 423

<210> 252

<211> 268

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F11

<400> 252

cccacgcgtc cgcccacgcg tccgcacacg cgtccgccc cgcgtccgct tgttgaataa 60

gttttgact ctctcgcttg acgggtttct tctcttgctt tttttcttct tctgcataga 120

agcaactaaa tactttttga agaaaagtct ttttcttctg ttgtttctta aataaaataa 180

cactttcaac tgaaaaaaaa aaaaaaaaaag aaaaaaaaaa aaacaaaaat agaagaaaaa 240

aaaaaaataa agagtcaaca acacaaaa 268

<210> 253

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F4

<400> 253

gaaatgccta aactgtttga gataacggaa gatgcctttt tggaaccaa agagccaaca 60

gctatagaaa aatttcaggc tcggtttgaa gaatttaaag aagttatcac tgaatcagat 120

acttatcaac gaacttcaga gattgtggaa tctgttgctc attactccaa aagggtttta 180

cgctttactg gcaatttggc ttggattggg gcaacctcag ctcttggtgtt ggtagttcct 240

ttggtatatg aaattgataa ggagttgggt gcttctggag gcttggaag tgctggttcc 300

actggggacg ccgccggtag tacgactcag ccttctgcc agtaataata gtttttacat 360

ggagcgaaac gaacaattgg ttatctgcc gttgggttcc aaaatatgtc aattttagt 420

agttttcact gtattgttgt 440

<210> 254

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G1

<400> 254

cccacgcgtc cggcatgtcg gaggaagagg aagcagattt tcgagggaat tgtgactcgg 60

ttgctattcc aaagaccacc gtgaacaaag tggcgacaga agtacttgcc aatgccggtg 120

cgcacttttc gtccgatgcc aaagaactat tggttgggtt ttgttctgaa ttcgtgcaac 180

ttgttagttc ccacgccaac gaattgtgtg aaaaggaaaa caaaaagggtt atttctcccg 240
aagacatttt acagtcgttg gaagaactgg ggtttggaga ttattgccaa gaagtgaac 300
aagtgtatga agaattcttg gaaattgaaa acgtaagtta ggaatataac gtggtggtgg 360
tggtgcgtcc ttccaagaca agttggacaa aaatgaccga aagaaacgga atgacggaag 420
aagaactcaa ttgacagcaa gaagaacttt ttg 454

<210> 255
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-005-Q1-E1-G2

<400> 255
cgagacgcgt gggcttggca agtctatgta gaccaacatt tgcttggttc cggaaaggta 60
aaagacgcag caatagctag ttacaaggg aatatttggg cgcgttctgc gggttttcaa 120
gcttccacgg aagagttgaa aaagttgatt gcaacctttc atcaaacc aaagaagcagct 180
caaaacggta tttttttggg gaataagaaa tacttttttt tgcgttcgac agaagatact 240
atztatggga aactgggtga cgatggcttt gtagctatgc aaaccaatat gtgtctcatc 300
atanagatat ttaccaaacc cgtatctgcc gccgagtgtg caaacgggtg aagaagaata 360
gtcgattacc tgaaaagtgc aggttactaa ctttctgtcg catga 405

<210> 256
<211> 258
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G9

<400> 256
gtccgcaaca gcgaccgcc acgcgtccgc ccacgcgtcc ggtacgacca ggagtgggaa 60
tagtatattg cagtttggtg aatgcatatg caaggaaccc agtattgaag cagcagttat 120
ttggagtaca cgatattagg gtttgcgtta acagaggcag taggactgtc tgcattgatg 180
atgagttttt tgatactggt ttcatagtat aggagaaaca agaagtagaa taaaatact 240

agagacagaa gaggagtt

258

<210> 257
<211> 333
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H1

<400> 257

ccaacgcgtc cgcccacgcg tccgcccacg cgctccgcca cgcgtccggg aacaatgcac 60
ctcatactgc tgggttccag tacagaccta tgaaacttat caatgttctc aagagaagaa 120
gaaggagtac agctatcctt gtcaaactta tgagcagggt tcaactactt accagtgtgg 180
tcagtacgag tcccaacaag ttactacca atgccaaaag tataaggagg ttactcagca 240
agaatgccag tacgtccaag agtcgtattg tgctgagtat gaagaatgtc agcaagttac 300
ccaggaagtt tctccttcag aaattgtcta cta 333

<210> 258
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H10

<400> 258

tccgggtcca tcagaagaca ttacatggga gccaaagAAC gtagtaaacc acagagtcgc 60
tcttctaaag cgggccttca gtttccagtt ggacgtgtaa gtagattctt aaagaatgga 120
aactatgcag aaagagttgg agctggagca cgcgtgtatt tagctgcagt tttggaatat 180
atgactgcgg aagtgttggg actggcaggc aatgcagctc gtggtAACaa gaaaaccCGT 240
atagttccac gtcatatcca gttggcagtt cgtaacgacg aagaacttaa caagctgttg 300
ggcgggtgtga ctattgcttc aggtggcggt catcgcaacg tccatcccaa tctgctacca 360
aagaagaatg caacggaaga catgcactaa agttttcctt gaactgggtgt ttttgaaca 419

<210> 259
<211> 402
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-005-Q1-E1-H11

<400> 259

gttaggaaag gcacaatgtc attgacagca ccgttcaagt ttagtccacc tcctgtgcat 60
gtcaaaagac aacaacaaat gtacaatctg atacttgaat atgcaagaag aaaaggaata 120
gacagaattg tagagatgaa cggcaaatgg tggatatata ctaggacacc tcccaatcga 180
aaggcactgc ggtattggta tgacatggac tgcgtggtgt tgaaccagc caaggactta 240
caaacggcca aagcttatgc gagaagagta aaagaagcag tggagaagag aactacggtc 300
gaattgcccc aacaagatat ttgtgtacga cgtagcgacg ggaagaaaca cggagtggtc 360
gctangagaa gagaagatat tgagtttgcc caagatacag cg 402

<210> 260
<211> 447
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H12

<400> 260

gcgaccatca ggcgacttga tcgttttttg caccagaata acttttgcac ggctgcttcc 60
gatgtttcca agtctactag ttggttacia gacggaagtt taccaaagga actgttgact 120
ttttcagggc tactgagaca ccgtgccaac tgctgctgaa aactcattgg ttacctcac 180
gcagctgtgt tggcgctttt ttgtcttggt caaggcaca tttccttatt atttacttg 240
cgcttcgtgt tggcggaag tcataaaaac caagtgaagt ttccgggcgg gaagttggac 300
gcgcaagata aaggtgaccc tgtacaggcc tcccttcgtg aaacacaaga agaaataggg 360
atattaccag aaaatgttat tacactaggt ttatttgatg actatcgctc tatcaatgg 420
tattgcgtta cccctgtaat tggctttt 447

<210> 261
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H2

<400> 261

cccacgcgtc cgccacgcg tccgccacg cgtccggagg tgtatgatgc aggcaaagaa 60
 gtgacgcagt agatcagaga gtaacacatg caagtaggta aagcgaacgg gtgagtaaag 120
 aggtgtgaaa gagtggaaga acatgaaagc acagaagaat gtaaggcggc gtcataatag 180
 aaatccgaaa ggagtagaag aaaagagaga gaagaaagaa aagaagagaa aagccgtact 240
 gaagaccgac acaggtactc gaggagaaga gagaatgctg ggtggagtag cgaaacaaga 300
 gaaggggaagt aaaaggttaag aaagaggaaa ggtttacgag agaagggagt agaaag 356

<210> 262
 <211> 293
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H3

<400> 262

acgcgtccgg gaatgagcgt ttgtcgcatt tttgtacgca accttgata tatgtggaag 60
 atactgcttc cttggcatcc gcttatcatc agttgatatt gcatagtgtg cagcgagtgt 120
 tggttataca acatgaaaca aagcagttga taggttgggt agatggaaca agcataagga 180
 aagcatttac tgtgcagcta tgtagatgga ttactcaccg tttggacaac aacaaccaca 240
 atagcagcaa cagtaaataa aatgtattct aaaaaaaaaa aaacaaaaaa aca 293

<210> 263
 <211> 183
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H9

<400> 263

aaacaagtca gctggagtta gagcaagaaa gaacttgcaa gaaatcaaaa aacttgctca 60
 agaactacgc atagagatac aagcgacgaa acaaactgaa aagtgatact ttcaactgtg 120
 cagaatcaac catggcttgt gaaactattc cagtttttca aataaatacc ttttttcgtt 180
 tgt 183

<210> 264
 <211> 442

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-A1

 <400> 264

 gtacggtcgg aattccgggg ccaccacgcg tccggcagtg aacgtgaggg tagttcatca 60
 tgggttgagac aaactcaaga tgggtgtagt gcttctcttt ggactgttcg tctcttcctc 120
 caaacagtta ttttagcatt ctctgccact atcattggct tggatggacg ttaagcaaac 180
 aacatatgga acgacagctt attctatgat gggaagtaca ttaacttttg tgcttattct 240
 gcctcttctg ttgtagaagg aggggaccat ggagcgtgta aatatgtcat ggcgttggcg 300
 tctataagtt tgattctagt ctttttcttg tggcttttta catttgtaga tgcgttgat 360
 cctattctta ccaagttttg gtttattgaa ttgggtatca acgtgtttca aacaatgtgg 420
 tgggttggtg gaacaattgt tg 442

<210> 265
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-A11

 <400> 265

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 acatagtctt ttagaatgtt acaagaatcg taatcgatgt tctcctgtc atgtagtagt 120
 atgggctatg acagcttcca acggaaagga atcatccgcc agaaaatccg gtgcctccga 180
 taaaccaaca gcaaaatctg attcgtcgtc acaacaggag acaaagaaag aagaagtctc 240
 caaagcttca caagcaaagg ctgaagtttc aaaatctacc tcgactccag atgctgcaaa 300
 gacggtaact cagaaacaac caacaactgt ggaaaagcaa actacaaagg agccagttga 360
 acagaaaaag gctgtttcga ataagccaaa atgggtcaaaa gcattgcctt ttatgttggtg 420
 gccaaaaaat ctcgat 436

<210> 266
 <211> 325
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A12

<400> 266

gcacaagaat accaatttta ttgcagcggc tgagatggac aagttgagta atgggttcggt 60
 aaactttcaa ggaaaacgtg tcctttgtag agtacacctt aatgttcctt tgggtaaaca 120
 aacaggagca attaccaacg gacaacgtgt gcgagcaact cttcctagca tcagatctat 180
 attaaaaaaaa tgagcacaga gcatcgtact tctttcccaa ttgggtcgac cagaacgaaa 240
 agtggacaaa acatactcct taaaacccgt aacggcatat ttacaacagc cgttgggtcc 300
 aaccggtcgt ctttctggaa gactg 325

<210> 267

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A3

<400> 267

ggggacacgt ccggaggact gtgagtgatg agtgcagtta gtcaagaaga ggcgcgagaa 60
 ttgttggcaa agttacgagc aaagccggag aacaaatttt gctttgattg caatgcaagg 120
 aacccactt gggcttctgc ttcctttgga gtgttcatct gtttagattg tgcaggagtt 180
 catagaaaac tgggtactca tgttacattt gtaagggtcca ctattatgga tacttggact 240
 ccacatcatt tacgtcttat gatgttgggt ggtaatgcca aagctcgaga gttttattcc 300
 caaaatgggt ggagtttggga tagtgggaaa ggtattgaag agaaatatac aggtcgtatt 360
 ggacagcaat ataaagcgta tctccagaaa caagcagtta tagccgaaga aag 413

<210> 268

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A9

<400> 268

tcccgcgac gcatcagcga tccggaaaag gtccaaacaa gagaagtcag cagtggggaa 60
 aattgggcaa tgtacaggga agtatgaccc agtaatgagg agtggagtaa acagaaaagg 120

aagtaaaagg agggaaatgaa gggaagttat ggcaaaaaca cgtgccagca gcagcggtaa 180
aacgtgtgta gcaagcgtag agcagaagaa ctgggtgtaa aggtcgagta gtagagtaag 240
tgtaaaaggg aaaggaaagg agagaaagag gaaagggatg aaatgcagag atctctagag 300
aaaggcaaga aagaaaagaa aggaagacac agtaaatgag gcgagaaagc ataggaagtg 360
aaacggatta ggaacccgtg tagtctatgc agtaaaagaa agaattgagta agaaaaaagg 420
gagtcattcc accagggaag ttatggcaaa aacac 455

<210> 269
<211> 320
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B1

<400> 269

gtccgcccac gcatccgcgg acgcgtgggt tttctcgata ctctccgac ttttccttgg 60
cgatatttaa actgtccatt agaaacatta atgtgagaaa atgacttttg aaaattggag 120
actggaagaa gagattatta atccttacct ctttgagttt gagagttttg atggactgaa 180
tatcccatgt tggatgtatt tgccaaagtc gagctctaaa aagtttccaa tactcgttca 240
cattcatggg ggaccggaac agcagtcact tccagttttt actccgttgt ttcagtactt 300
actgttggag aaaggaatag 320

<210> 270
<211> 437
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B10

<400> 270

cccacgcgtc cggggagtgt aagtttggtta tcgcaggttc gcaacatcac gagtttgaaa 60
gcatgctgcc tagcgggtat agaaactcaa cgaggatatat tgaaccgttg agtaaagaag 120
aatttaaaat atggcaagca ctggacgatt atcctgaaac atttagagat aatgaaagca 180
ccattgtgga ccttacgggt cgtgttccaa gaacgatagc ggaactgatc gaactgagtc 240
gcagttttcc taacttcagc tttgaagaat tggtcgcatg gtttactaaa aacgcttttg 300

gagatatgaa gaagaggcac gaagcatatc tcgactcatt gacggaaaaa cagaagaaag 360
 cgtcttataa catgctctac gagctatttc ttggcagga aactccagca attacattgt 420
 ttgatagtgc ctatcga 437

<210> 271
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-B12
 <400> 271

agagaccaa agatgggact ggaagagaga gttttcattg ccttgggttc caaccttggg 60
 gacaagtctg ccagtttatt cggagctctg caaaagctca aggaatttgc caaagtcgtt 120
 gccacttcat ttctttacaa gacagcacct atgtatgtag aagatcaacc atcattttat 180
 aacgctgtgt gcgaaattcg gacagaaaag gaacctcttg acctcttaca tcgacttcaa 240
 gaaatagaga actcgttttg aagagttcga ggaggtgaga gatatggacc tcgatcactc 300
 gaccttgaca tactgatata tggtaacaga atcataaaca ccgttgaact tgtagttcca 360
 catccacgaa tagcagaacg tgattttgtg ctttttcctt tgagagacat cgatccgaat 420
 atgccg 426

<210> 272
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-B5
 <400> 272

gatgcagatt ggaaaggaaa gaagaaacct cgtacggaca atatcaaata tccacaatga 60
 agtacatgtg gatttgacct ccttcttctt tagttatttg catagcagaa taagtaattg 120
 ctttgatttc cgttccctgt ggatgtcggt gtgtatcgaa tacttctcct tgtccaatgg 180
 cctccacgag aaacaaacct aatacaagtt aactcgttgc gtttgtggca aggaatgcct 240
 ggtttaccgt ctagttgaat acgtgttacc tccagttgac atagaatgat ataattggct 300
 ccatattgaa agaggcactc atctagaaat ttgtaaagga gactgtacaa gtcgtgtcct 360

tgtgcttgaa tatgtatcga accaatttca ggggccggct tgactgtttt caaatctgtc 420
atataaccga aataagacaa accttgtggc gc 452

<210> 273
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-C1

<400> 273

gacgcgtccg ccaacgcac ngcggacgcg tggggtcctc tgccaaagat tgcttttatt 60
gcatctccca acaatcccga tggttctgtt gtttcggatg atgacttgag agagttgcc 120
gacttgccca tgactgtggt attggatgaa gcttattatg aattttcagg aaagacgcac 180
gtggattggc tgaaagacta cgacaatctc atcattttgc gtaccttttc gaaatgggca 240
ggtttagcgg gacttcgact tggctatggc attttccctc gtagtataat gagccaagta 300
tggaagataa aacaacctta taatgtcaat gtagctgctc aattagccgg aatagcgaaa 360
ttggaagaaa aagattatat gcccacacga gtggaaatga taaagtcgga acgccaacga 420
ttctatcaac gcatttcgaa atatgaat 448

<210> 274
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C10

<400> 274

cacacgcgtc cggctcttcc ttatattctt tgtgcttgga caatgggttc aaagactgct 60
ctgagttgcc tctttctctc tttccttacc gctgccgcag ttgcagccga cgtagtttca 120
gaggagagat ggggatatgc tcagcaaacc caacaacagc aacagtgcc acaagtatgt 180
aaacagtatg catactatca gagtccagtc tgcacttccg taaccacaca gagcccatat 240
tggaaccaat gctcgaagac tgtgcaaacc tttgtcccaa gccagtgcag tacttatacc 300
caatctccta catggacctt ttgcagcacc tacaccacca ctagcgtacc atctcaatgc 360

agcaaggccg tgactactta tactcaaacc tgctgtgctt atgcccaaca aacttcctat 420
gcagtcagta ccgag 435

<210> 275
<211> 344
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C12

<400> 275

ccacgcatcc gcagacgcgt gggaagcgac ttggttatca taacacgaga gacgcggatg 60
ctgaggtaga acgtagtggc cgcgttgcac ctacagtga acctcggcgt aaaggtccac 120
gacgttctgt ggagaggtca ttgtgataga tgtcaggcag ctacggcaag aagtatgcgt 180
ttccgtgtca aaagactatc cagatgtgga actgccacac atctcctccg ttaccacagc 240
aaggccattc tggcccaagc gccctcagtt tgatacgatt gtgattgaaa atcgggttgt 300
acatatactc actcacgtag cttctacgat ggctggaccg acag 344

<210> 276
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-C7

<400> 276

ttccggggcc acccacgcgt ccgccaacgc gtccggaaca agtggaatat tacagacagc 60
atcactggaa gtgtaccaag tgtgactggg ttgtgaaaag agcaatgaat agagcaccta 120
gtttcaaaga cccttgggtg aatatacatc aacgtagatg tgatggacaa tttataaaag 180
tcaagcaacc accatcttat aagaaaaggt ctctaggtat gcttccacta gaaacgtatt 240
tttccaaata aaaggacaaa tggaacttta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aagaaaaaaa aaaaaataa aaaaacaaaa aaaaaaaaaa 360
agaaaaaaa aataaaaact acataaaaat aaaaaaaaaa taatttaaaa aaaataataa 420
atgaaaacaa 430

<210> 277

<211> 203
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-D1

 <400> 277

 atcttatcga cctgctcccc tttattgttc ttgatgaagt anacgcggct ttggatcgcg 60
 ataatctcga aaaggttgca agatatat tacaagggtc aaaaatgagt tgcgagcaat 120
 atatcgttat ttcattgaag gataagtttt atgaaatggc agatgctctg attggaatat 180
 atcgagatat ggacaagtcg tgt 203

<210> 278
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-D12

 <400> 278

 cagacgcgtg ggcggacgcg tgggtttgga aattggtttg ctgcgtcggg gaagcgcacg 60
 gaaatatttt ctagtcatgc aaatatttgt gaaaacgttg acaggaaaga ccataacgtt 120
 agaggtcgaa ccttcggata ctatagaaaa tgtgaaatca aagattcaag ataaagaagg 180
 tataccccct gatcaacaaa ggcttatatt tgctgggaag caactcgaag acggaagaac 240
 tctgtcggac tataatattc aaaaggaatc cacgttgac ttggtattga ggtaagggg 300
 aggtattata gaaccaactt tggcagcatt ggcgagaaag tacaactgtg acagaatgat 360
 atgtcgcaag tggtatgcca gattgccagc aagagctcaa aactgtcgta agaagaaatg 420

<210> 279
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-D3

 <400> 279

 ggtccgtagt tcacgggtgg cacgacgcgt ccgttgagac gacaacaaca attggttggtg 60

ttgtttgggc tttttgtttt ggggtttgtt tgggtgaaga tggcgacta tcaacattac 120
 cgagctagta cagcgggtat agctttggga gaagcacttt ctgaactcaa ggaacagaac 180
 ctctttacgg aagcggaaga agatgtgatt tggaggaagt ttgaccgtgc catgacagaa 240
 gcccttgctg ccaacgttgt ggatacacac cttacgttga aagggagtct tcatcactat 300
 cgattctgtg ataacgtgtg gcaattcttc gtgaaagacg cacaagtga atttgacaaa 360
 aggtcggatt ttactccgcg tggttatctg aaagtanttg cttgtgatta tgtaaagcca 420
 accaacccaa agtctagtta attttgaagc ccaat 455

<210> 280
 <211> 344
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-D4
 <400> 280

acgcgtccgc acaaaaagta ctgtttatth actagacaga agctgataca gctgctgtcg 60
 tacacaaaca acacaagcaa acagttggaa gccgactgtg aaaccaaccc acatttccag 120
 actcccaaca gaactgcttc tcagttagtt acgcaatatg cctagtcata aggaacaaaa 180
 taaaggaatt aaaatatcag ctgacggtta cgcactaaag ttgagcggta ttcggttgga 240
 cgtagacggc aatttgggtca ctatggtgga cgcagacgac ctcatagccc tcatgtttaa 300
 agaaagcctc aaagaaaagt caaagctgca tgacccaaaa tttt 344

<210> 281
 <211> 55
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-E1
 <400> 281

acgcgtccgc aatgcgccac atcaaaaaat aaaaaaaaaa aaaaaaaaaat gggcg 55

<210> 282
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E10

<400> 282

tggttcaagc atatcgtcaa gaagcagaga actggcggtta cgggaatcca tatcaacaaa 60
cgcttcattt ggataagatt gaaacgacag acaaagtctg aatgtgtcgc cactgtgcac 120
gacaacaacg aatttccgca aatgctacgg aaatagctct ctttgctatt caaagagcac 180
taacgccatg tttagctgga ctttggtatc atcaacgcga agctacgtga aaagaattcc 240
catgacaaca tcatcattta tcatataata ccaacgtatc gactgtatct ggtaagaata 300
gtaattcttc cccttttttc ttccacaaat gtatgtatat ctattcgacc acatctatgc 360
ccagttagta agcttcatat cagcttaact aatcttttca atcataaaca ggttctacat 420
cc 422

<210> 283

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E11

<400> 283

gattcatttg gcagacgctg ttccttgga tgaggacttt acttgttttt ggaaaggctc 60
tattcaattt gcgaaatatt tcaagcttct ttttggttcc acacttgttt atgggtattgt 120
aggaaagagt gcgagtcctg atttaccgga attggaaaaa catcgtctag gaggtattgg 180
ctcgttacgt ggatattcta cgggtgctct aggtactgct acttgttcct tacaacaaag 240
tgtggaactt cgttttccat tatttccacg agttgctgga gtttgttttt atgattgttt 300
ggataaaacg gagtggtggt ggagaaatcc aacgcgttta ggtgta 346

<210> 284

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E12

<400> 284

gcagactgac tagctactgg aaaaaacctg ttgaagaccg cctttgctcg ctctcactga 60

caaacactcg taatatgtgg tgcttctatg ttctacttc aattttatat acacaaacta 120
 tgattaccaa ggaaattgta catcttaaga acgatacaaa ggtctttgag ttcttttgtg 180
 gagtctcgta cgggtggacgc aaagctatca cagttcaaca gagtctcgta aaccaacaac 240
 tctagtccat ctagagactt tcagagaaat tatgagaaaa gtatttcacg gaatagaagt 300
 tgtgagattt tggactgtgc agtttgcaat catccaacaa gcaccagcct actagtttgt 360
 cgtgcttgta gcacaaaaaa gttcctgggt gtagttacat attcacgtga agaaagagag 420
 aaagcaca 428

<210> 285
 <211> 370
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-E2
 <400> 285

cggtcgagat tcacgggtgc ccgcacgcgt ccgcaaagtt tggttgtttt cttggtagca 60
 gttgtacatt caacatcatc aaatgccaaa gggaggaaag aaagattctt caaagaaaga 120
 agccacaagt aaacctgcag cagcagatgc tacaagacg acagaaaagt ctgggtccgga 180
 agccaagttg aagggaaactg gtgcaaagaa acaataaaaa gttgactatg catgtgtaag 240
 tatttgtgga ttttccagta gaacaagcta aagttgtttc tgaaggcagt cctgttatgt 300
 tttgtgagtt ctgtttgata gtttccagct attcttttgg tagtgaataa agagaaaatt 360
 ttttaattatt 370

<210> 286
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-E5
 <400> 286

gtaccctatg tggccctttt tctatttggc gtctcttgga actcgtaata acacttttct 60
 ttctttggcg cctttagggg aagttatgtc gggattcata gtacggggtt taaggacttc 120
 ttgttaaagc cagagcttct gcgagccatt caggtgcgtc aaccacgta tagaaaggta 180

acttgcttga cttggacacg ttggacagga ctgtgggtttt gagcaccctt cggaagtcca 240
agaacagtgc attccacaag caatactagg cggatgatatt gtatgtcagg caaaaagtgg 300
tatggggaag acagcagtgt ttgcccttgc tgtacttcac cagttggtac ccgaagacgg 360
aaaagttagt tgtgttggtc taggtcatatc cagagaactt gcatatcaaa tagctcatga 420
atttgaacga ttctcaaag 439

<210> 287
<211> 403
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-F1
<400> 287

gcgtccggtg attagagatg aaattatgga gaagttcagt ccagacatgc acacggaaac 60
tcctcaattt ggaggggttg ccaatttggg tcgttctttt gcaaaaatcc atgaaaacaa 120
cctcaagaac agggcttctt cctctgacat ttccgatccg gcggattatg atcgtattag 180
cccagatgac cgcatttcta ttttgggatt gaaggacttg aaacctggaa agccccttac 240
cgttcgcgtg aagaaacaaa atgggtgagac ctttgatata caagtgaacc attcatttag 300
tgaagaacag ttcgaatggg tcaaacatgg ttccgcgttg aacaaaatta aggaggactt 360
gaaagcaggt cgcagacaaa tgtacatgaa gtgtgcggac cct 403

<210> 288
<211> 439
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-F10
<400> 288

cattttacaa gccaaaggcgt ctcttcctgc ttgcaacaaa ccacgtttgg aaccaaagcg 60
agcacttggg aacaaagtat tgcaacaaaa agtaaaccaa tatttgcaca aataataacc 120
aaagatggac ttgttgccgt ctacggaaat tagggaagga aatagaggtg gcagagacca 180
gtttagtgtg gagaaagtaa aggaagataa atatagagaa aactatttgg gacactctat 240
tcatgcacca gttgggtttat ctgccaaagag aaaagaccgg cagtgggtta ccaagcctcc 300

agccccccac cctgtgagta accgcgagga acttgaaaaa atacaacaac aagaagctat 360
 tatgctgaga gctagtcttc aaggtatacc tgttcaggat gccattgcat tggcactcca 420
 acanaccacc caagagagc 439

<210> 289
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-F11
 <400> 289

cccacgcgtc cgggtgcgtcg acgtcgatt tgtagtagta ttgtggtgct ctttccaacc 60
 ggtttctcca acgacgcaac acaaaaatgc ctctgtggtcc aagaaaacat atgaaacgtt 120
 tggcagcacc caaacattgg atgctcagca aacttggtgg tatttgggca cctagaccta 180
 gcagtggacc gcacaagttg cgagagtcac tacctctctt attggttctc cgcaatcgac 240
 tgaaatatgc gctcaataat agagaagcag tggctatattt gatgcagcgt ttggtaaaag 300
 tggatggaaa agtacgcacc gataaaactt ttccagcagg tttcatgggt aagcaaagca 360
 tcggtcgaaa tcgaatgtaa agtgattgac tatggaacct agatgtgatt gaattggaaa 420
 cgaacaatga aacttt 436

<210> 290
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-F12
 <400> 290

gatttattgg agcctctttt ttgggtgccca aagaagaaga agaaaaagaa gaggaggatg 60
 tcgactttgt ggggaaaacc caagtctaga aacgtacaaa tagaacattg gttacattct 120
 ttggaagaag ttgaacaagt agccaggtca gtggaaccaa aattggtttc aactacagcc 180
 aatggaaaag gaattgcccc aaactgcaaa gaaatagcta ccgacctttg tcaaatatcc 240
 aacaagaatg acccccatta tgaggttcta ttggcatctt atacaagttc gaggaagttt 300
 gaagacgaac aacatcaagt gaccaagacc aacgaactta gggatagagc agtcgagagg 360

ttgcgccatt atttategga aattcagcaa ctgaaagcac agtgtgtcga agaacaaaag 420
 ttgcgttccc gactagagca 440

<210> 291
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F5

<400> 291

ccacgcgtcc gacaagttat aataatgaag tttccagtca ctttacggag aagcagaact 60
 gggtaatgaa tacaggagtc tattatgaga ggcgttttga aaagaaggga ctttcacctg 120
 gtgcttgga agacgcgagt agttccaatt ctcataaaga aggtctctgt attggcccaa 180
 actgtcaact ttagtttgc tctgttgata acctgaaaga cttcttgggt cagcaagttt 240
 atgaacaact ccagaaagta tactcggata atgaaagcgt tttgatgaag ttggatcctc 300
 tcgcgaagtt gttgggaaga aaccttggac aattatggag gggcgatgtt cctatggagc 360
 ccgaaccttc ccagatggat attgtttcca ccagaactga tacagacgag 410

<210> 292
 <211> 427
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-G10

<400> 292

acaacttggt cttagggcaa cttgtcgggg ttttgttttg gcgccatggt ggtatgcaaa 60
 tactttcttc gaggtaactg caaatgttgg cgcaattgta agaacgaaca ccctatgcag 120
 aatgctgctt ccaacagttt tgggtgctttt caaaaagagt ggaaggatcc ttttcattcc 180
 ggagcgggac agtcttcttc agttttcaat agttttggaa accgcagtgg gaaaccaacg 240
 agtcaagatc cttttcgttc gttcaagtct tctgggaatg gcttttatcg taaccagcga 300
 aacaacgttg ctatggatat cgcttcgtcc aacgacgatg cacgaggtcg tggtagagtt 360
 gcttatcatc ggggaagagg aagagcanat tatcaagaca gtcgttttca ttcaagtga 420

cctaatc

427

<210> 293

<211> 417

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G12

<400> 293

cggacgcgtg ggcggacgcg tgggattgca gaccagcgac tccaacattt ttgcagttgg 60

cgatgttgcc acatttcctt tgaaaatgta tgagaatcgt ctcgagagag tggaacatgt 120

tggcaatgcg agacaaatgg ctatgcatgc agtggatggt atttttgggt ctcaaaaagc 180

ttacgactat ttgccatttt tctattcgag agtggttgat aagagttgga agttttatgg 240

agataatccc aaagatgcca cttgtttggt atttggagaa atgaatccca agttatttgc 300

ggtttggata aagcctaatc atcaagtggg tggaaacctt actgaaagtg caactcctga 360

ggaagaaaag aaaatcgaac gaattgccag agaacgtcct gttgtggacg tggaaaa 417

<210> 294

<211> 461

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G2

<400> 294

cgcgtccgaa cgtatatcat ttcacattct cctttagaaa aactatgaag tctttcggca 60

ttgctattgt tttcataagc tttgttattg catcttatgc agcagttgta tccgaaatgg 120

catccaatga gtttcaaaga ggaggatacg ctcttctcc ttccaaggaa tgctgcatga 180

ccacttgta atatgcagaa ctttgcccaa tttctcaacc aacttatagc caagctccat 240

cttacattcc atctctacc tatggccaag ctcttctca caatcaatat tcttcttcgt 300

acggttcctc tagctatcgt ctcttaactg cagacgaaaa ccaacttggt agcagaggag 360

gttatgcacc aacaagccaa tgtattctag ttcctatcca atgctgcact gattgcaaac 420

aatgctatgc ggcatggagt ttccaaaata ctgatacaat g 461

<210> 295

<211> 459
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-G6

 <400> 295

 ccacgcgtcc gcagctgtat cgcgacata gaatggcaac agataaaacg attcgttgca 60
 gcagccagtg gattcatctt gtagcaccaa gtggctgttt attgcaaccc cactgttgga 120
 agttgcttgt actgatgggc agcgaattga aatgattcct ttgaagaaag atataaagga 180
 attgtttttc tctactttta agaagaactt tgagtcgaac gaagcgatc gggagtgcag 240
 tgtagttgaa accgcagttg ctgtttttat ccagtattat gaacagtgtg tggaacagta 300
 ctatctagca agcaaagatt atgagctacc tggttattcc aaagtaaaac agattcggag 360
 tatgattgaa gatgttctac aaatagagaa ggaacttgga aatatgcgtc agactcttgt 420
 tggcgttcgg agtcgtcttt gtactttcga agctgcac 459

<210> 296
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-G7

 <400> 296

 ccacgcgtca ggaggaactt gccacaaccg gacctattct tgttgctgct tgtggaaatc 60
 ctgtagtaga aactggagct gcagttattt attttctcga tgttgccacg gcttcccttg 120
 ttggtcagga acgtgtcgtc ttcaatatga gttgttcagt ttggggaatc agtgtttgtg 180
 agagaaatgg actaatagct ttgagttcca acgatcactg cattagtatg attcgtatat 240
 gtttagagaa cgagtggggg tctcaaaata gattctttat tgttccttct gcttgtagag 300
 gtcaccaaca taatattcca agtattgact tttcaaccaa tggaagattt attgcctctg 360
 ttagtatcga tgaacatta cgagtttggg atctctcgac gggatcaatct attggatttt 420
 ctgaagggttg t 431

<210> 297
 <211> 180
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H1

<400> 297

ggtcggtaat acggggccac cacgcgtccg gtatgggatt gcggtgcttt cttctctcca 60

aatgcctatt aacaatctta acaaaagtgc catgttaaga aaagcaaact ttgcttataa 120

atatatggga agattctcca ataagttcaa cctcctaaag aactttatct ttggaaaaat 180

<210> 298

<211> 274

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H10

<400> 298

cggggccacc cacgcgtccg caggaccttg tccgttggat gacatcggtg tacccacgtc 60

tgctgctcca tcaccgcagt cggctgttcc ttcattttcg gaacctagtt tcgggcctcc 120

ttctggacct agttttccaa cttttgatgg tgagccctca gctccatcat cattttctcc 180

cttcggaagc agcagtggac ctgaattttt cccgatttaa atagtacaga accaagttta 240

gggaagtgtg caactccaaa ggggggttgg tagt 274

<210> 299

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H11

<400> 299

gataatgact gtgttggaag ggagagaata ggacatattt caaagaatac agaatatcgc 60

tccattcatt tcatttcatt gttagtgttt atcctgcaaa aatatttgga ctacattgca 120

aaggaaaact ggaaagaggt tatgatgcag atatagtcgt ttggagtcct gaaatgattc 180

aaccttttcc aagtcctatt tgtcaaaagt ttcagcctct ttgccaacaa atgaacagca 240

ctttgaaagg agtagttttc gatacttttg ttcggggtcg aagagaaaat ggaaaagtcg 300

tccttgatgg aagaagcaag cacacaatgg gaacaagatg gaaaggaaca ataggaaact 360

agttcgaaag cacgaaaaca gaaacaacgt tgcgaaagac taaagaat

408

<210> 300
<211> 212
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H12

<400> 300

cccggatcca tccacgcgtc ctgatatagc gcaggactag tatgggatat cctcctacct 60
agatgggtatt taatccccgag gcaacacagc catatagcaa agtgaataag catgtcatgt 120
aatgactgta tgagaccaac tagtcaggac ttttactacc gactctgaag aaacgcttga 180
cttgcttcat cagtttatgt cattcgaccc tt 212

<210> 301
<211> 429
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-H3

<400> 301

cgggtccgtag attcacgggt gccccacgc gtccgacaag ttataataat gaagtttcca 60
gtcactttac ggagaagcag aactgggtaa tgaatacagg agtctattat gagaggcggt 120
ttgaaaagaa gggaccttca cctggtgctt ggcaagacgc gagtagttcc aattctcata 180
aagaaggtct ctgtattggc ccaaactgtc aacttgtagt ttgctctggt gataacctga 240
aagacttctt gggtcagcaa gtttatgaac aactccagaa agtatactcg gataatgaaa 300
gcgttttgat gaagttggat cctctcgcga agttgttggg aagaaacctt ggacaattat 360
ggangggcga tgttcctatg gagcccgaac cttcccagat ggatattggt tcaccagaac 420
tgatacaga 429

<210> 302
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H4

<400> 302

cccacgcgtc cgcaaaagac tcaagtaatt gtatatttgt ttttggttgt gttgctgtag 60
ggcaaatatg agttcctttg atccggacaa gttcaaacia gaacaaaaag ctgcgtggaa 120
tcaaggagct ttatccacgt ggaccctgtg gaaaaaaact caagtagaag atactccagc 180
aaagttcttc ctaggcctag tacctattcg accaggagtg aaaatcttag accttgctg 240
tggtagtggg gaaacctccc ttcaagttgc tcacctagtt tccagccact taaaggatga 300
agccaaagac gcaaagatag tttgcgttga tatttcggac gaaatgctta aagttctcaa 360
ccaaagagca caggaaatgg ggctagcaaa tatggtggaa acccgctg 408

<210> 303

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-H5

<400> 303

cacgcgtacg caaggtccga gcaattagtt ctgcggtaga taaattggac aaagaatctt 60
ggagtcatgt tcgatcagag atgatagaaa tgaaaggatt gtaagcttct aaagcagata 120
agattgggga atacgttctt cgtcgagata atcctcaaag gatgctttca tctttatatg 180
cggacgctca tctttctgca atggcacgtt cctctttgga agacatggaa ctcttattga 240
aatatttagg agacttgggg atagaagata gtcgtcttat ctttgacctc tcattagctc 300
gaggattgga ttactataca ggtttaatat ttgaggcaat tttaactanc gatgaaggca 360
catctttagg ctctataggt gctggaggtc gntatgata 399

<210> 304

<211> 357

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-H7

<400> 304

ggaccgtcca caagaccac aaaaagtatg agtcgattca caaaaccgct tcaaaatatt 60

tctttaccgc aacgtgtaca gcaattttta gagccttctg tttggttgga gttttcacca 120
 ctatcaccct tgtgtgacgc tatcaacttg ggtcaaggct ttcttgattg gaagccaccc 180
 aagtttgtaa cggaagctgc atcgaaagct acgagcgacc caagttggag tcagtatgca 240
 cgttcgagtg gtttaccgtc tttggtatcg actattagta aaacttatgc gcctctgttg 300
 caaagggaca ttgacccttt taaagaagtt tgtgtgactg tgggagcatc ggaagct 357

<210> 305
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-A1

<400> 305

ggcaaaggca gtgagaattg gtgctgaagg ttacaggtta aagttggacg gtgcagttca 60
 agagatagac ggtcgttctg tagttctggt agatgtggat agtattaccc ctctcatggt 120
 tggaggtagt atgaaagaaa aggccaaatt gttggatgcc aagtttctaa ggaagtatta 180
 tgaggagaac aaggacttct tcttcttgtc gactagagaa gagaagaaaa tgtttgtgac 240
 gttgcaactt gccaggaat atgcagagct ggtagatgac caattcttga agggcttctt 300
 cgagaaggct ctggagtccg ctcagaagac gttttaattt gtcaagtana gtgtagtgtg 360
 cgtttttctg tgtgtatttg tctctgtgtg tgtgtgtctg tgtg 404

<210> 306
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-A10

<400> 306

agatgatcat tagtggaatg ggagaactac atctacaagt ttatttggaa cgaatgaggc 60
 gagaatatgg agtagaatgc gaagctggac aacctcaggt caattttcgt gaaacagtaa 120
 cgaggcgtag aaatttcgac tacttgcata aaaagcaaac tggaggtgca gggcagtatg 180
 gtggtgtcat tggatacatt gaaccctccg aagatccttt gcacaacgaa tttgtcaatc 240
 gtgtagttgg caatgctatt cctcctaacc ttattccagc tgtagaagca agtttccggg 300

aagcttgcca gaggggctcc ctgacaggtc accgagtaca aggcggtcgc atgggtattgg 360
aagatggaaa a 371

<210> 307
<211> 309
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-A11
<400> 307

tcgaccgggtt ttcttggttag cagttgtaca ttcaacatca tcaaagcca aatggaggaa 60
agaaagattc ttcatagaaa gaagccacaa gtaaactgc agcagcagat gctacagaga 120
cgacagaaaa gtctgggtccg gaagccaagt tgaacggaac tgggtgcaaag aaacaataaa 180
aagttgacta tgcattgttcc tgttaagttt tgtgagttct gtttgatagt ttccagctat 240
tcttttggtg gtgaataaag agaaaatttt ttataaacia aatccaactg taaaaaacia 300
agtttccgg 309

<210> 308
<211> 424
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-A12
<400> 308

tgcgtcacgg gcggaaatcc gggacgagcc cacgcgtccg caacgattcg gtgtcgctgc 60
tgaacacgtt tatgacgtag acgagaatac caagttgcgt tttgggtggga aagttcgtca 120
cggagaatcg gacccggcag gatattgtcat tgcccaatat gactttacgg tttccacaga 180
agattttccg ataaacgttc gtgcacgtgc gatattgaaa agtaaccagt gcatcggcga 240
tattcgtgcc aaaaagaagt ttgaagtgga cgaagacact tctttattct tcttagccaa 300
agcttgact caggaactaa caaaaggaag ttatattatt ggtaaagctg gagtgacacg 360
tgactttcgt ttgggtgaaa acacttttcg gttgggtgcg gtgtgtgacc aagatggaaa 420
ctgt 424

<210> 309
 <211> 359
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-A3

<400> 309

tcataacgta aacgatgtgg ggtaagagat gaaagaccac tgcattgagga taaggaatct 60
 aactgagtaa ggaaaataag aacattgagga aaaaagaagc aaatacggga aagcaattaa 120
 agaaaaaaga aaaaggaaaa aactgagtat caggaagaaa agagggagta gatgaggaaa 180
 gaaagatcaa ggaagtaaga gtaagagaag gagtaatgtg aatgaaagca ggaaagtatt 240
 tgaagaagag agtgtaaagc gcgtaccttt tgcataatgt cccagcgagt gaaagaggaa 300
 gcaaaaagaa agaaaaagaa gtagccaggt aagaccgaa gctagttgat cttatgctg 359

<210> 310
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-A5

<400> 310

agcgtccgaa cgagaacaat ctcccattca tcttgtgaca gacttggttc ttccaggatg 60
 gcatttgtaa gcacaacgtt tttgaagaat cgcttgagct caagacatag tcctttaaaa 120
 tgggtacaaga atcctaactg aagttcctcc tggaatggaa tagtaagggc taataaaaact 180
 tccaacggga aggaatcaac cggcaaaaaa tccggtggct ccgaaaaaac aacaagcaaa 240
 tctgattccg cgtcacaaca aggagacaag aaagaaaaaa tttccaaaag ctcaaaagca 300
 aaagctgaag tttcaaaatc cgcttcgact ccagatgctg cgaagacggt aactcagaaa 360
 cagccaacaa ctgtggaaag gcaaactaca aa 392

<210> 311
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-A6

<400> 311

gagacggaaa gagccatgcc tctgaagaaa aaaggtggca accaccaacg caaagaagaa 60
 atagctcaca atagactaga atatttatgg caaatatctt tgagttatgc gacgacgatg 120
 ccaagtatctt cccgttttcta tgtgtccatc atgtgggaga tgggaaaacg actcaattat 180
 cggttgata atgttaccgt gaaaagctgt ttttgtaaaa agtgctatac cgtctggata 240
 ccaggaaaga ccgtacaaat acgtcaaaca aagaatagca agagaaaacg ggtcatttac 300
 acttgctgt attgtaagag acaaaagaga tatggcacgg ctcaccgtcg ctaatccttt 360
 ttacaaagct ccacctttcc acaacatgtc gatggaacga ccgagggcaa ccataaaagc 420
 atcaatctct tcct 434

<210> 312
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-A7
 <400> 312

ttctatatcg ccacgtaag agtaaagtag ttgcgaataa tcatgaggaa caacgaggct 60
 tgctcgataa ggattccacc gataactacc tttcagtcgt cgatgacgag tcggaggaat 120
 ctttcgattt tggatgaagta atgatacatc aacttataca tactatcgag tttgtattgg 180
 gagcagttag taacacggca agttatcttc gtttatgggc gcttagtttg gcgcattctg 240
 agttgagctt ggtcttttta gaaaaggttt tgtataatac gatttattta caacatccga 300
 tagccattat gatcggtttc ttactttggg catttttgac tgtaggcgtg ttgtgtctta 360
 tggagtcctt ttctgccttt ttacatgcct tgcgtttgca ctggg 405

<210> 313
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-A8
 <400> 313

gtcaaagaag gaggagagca aagcaacgaa gaaaactcaa aataaaccta ccccaaaaac 60
 gaccagcacc tcaaaagtag agaagaagat cactaaaaag aattcaggat tgtcaaacaa 120

ggagaaagct ggaaagacag ctgctaacac taagtccaaa gccagtcaga aggcggcagg 180
 ttctaaaagc aaaggtgcag taacagtaaa ttctcaaagg agaactacac gggttacacg 240
 taaagcataa tctcgctagt aatttagtat tttacttttg gatgttgagg tatttggtg 300
 aatacaaaaag tgttgaaatt ggaatttatc ccatagattt gctatcaatt gttgaataaa 360
 agtttttcta ctct 374

<210> 314
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-A9
 <400> 314

tttggcccaa gatctgaacg agctcatctt ttggttccac agacatgtcc aacgaaaatc 60
 agtccgataa aaacactttg gaaaaaacg gggagaagct gcagaatgca gttcatactg 120
 gaacagagaa agttttctca gtgttgagcg acgtcaagga aactgtgacg gagaaataca 180
 aggaatggac agcaccaaaa agtagccaag aagaagcaaa agaaaaagca caagaagcga 240
 aagaagaggc taataaagct tttaatgcta tgaaagaaag tgcgagtgcc gcttcagagg 300
 ctgcatcaga gaaagcagaa aaaattaagc aggagttgaa ggagtgaaga tacacagtag 360
 ttttctccta tagtgttctt agtagtattt gtagtgatat ttgtctcgtg atgaataaaa 420
 cacggttatt agt 433

<210> 315
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-B1
 <400> 315

ctccgacgag tcgtatgccc acgcgtccgc tttgtgggaa gattggtgga ttcatactcc 60
 tccggttaacc agagcttatg tcactttaac ctccaaagtt acaataatat gtgcactaaa 120
 agtaatcccc taagaaacta tattataatt gggaaggagt caaaaagttg caattgtgga 180
 gaatatttac caactttttc taatttggac cctttggaat ggacttttta ttccacatgt 240

tctttctata tcgttattgc aagctattag aactgaatac ttttcgagga cgttcggcag 300
 actttgtatt tatgttgctc atcgggtggaa tattgttaat tatgctttcc tttttcaacc 360
 cctacatcaa g 371

<210> 316
 <211> 459
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-B11
 <400> 316

ggttggtggt tgggaaggct ttctttgtat aatataagac aggaagcatg ggaaaggata 60
 aacaacacgt ttccatcggt gtcattggcc acgtcgactc tggcaagtcc acaactacgg 120
 gccatcttat ctacaagtgt ggaggtatcg acaagagagc cattgagaag ttcgagaagg 180
 aagctgcgga aatgggcaaa ggttctttca agtatgcatg ggttttggac aaactcaaag 240
 cagagaggga acgcggaatt accattgata ttgccctgtg gaagttcgag actgagaaat 300
 atttctttac tatcatcgac gccccggcc atcgtgactt tattaagaat atgattacgg 360
 gtacctctca agctgacttg ggtattctag tcgttgcttc tcctccaggt gaatttgaag 420
 ctggtatttc ccagaacgga cagacaagag aacatgcac 459

<210> 317
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-B12
 <400> 317

ccaaaaaggg ttggaacgac ggattcaacg aattgtacga gttattcgag cattgacacc 60
 ttcagtcggt cattcagaca gtcctgttga gattcaagtg gagatttggc agtagatggg 120
 actattgtgt gaagaatcgt gtaaagttcc cgttgcagtt gctttagcag tgatttacga 180
 agtagatttg gatgaagatg aggttgattt ggagttggaa tactctggat acaaaggagt 240
 gggaagaagg gttgcaagga acattgcac aatgttggtt gaatggttgg ataatgggga 300
 atcaaatagt gattcatcag cctgattgtg atgttaagtg agtgcttgtg tcattgcatg 360

aaacccaatc cctgatttcc tcaccggatt ccgcaccgaa acaacaaaat gaaattaaaa 420
aaagggggg 429

<210> 318
<211> 161
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-B5

<400> 318

caaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 60
aaaaaaagga aggccgcaca aaaggggtgga agacttat tt cgtcgtgctt gcgactgtca 120
tttctcttct tgggtgtccc ctttgtttct tttcttcggg g 161

<210> 319
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-B6

<400> 319

agtatgtcca gatacaagag tgttttctgt ttttcacata aatacaagga acacgaaact 60
tattttctatc gggataccat ggggaccacg ttgtcctgtt cctttggtgt tcttcaagca 120
cctatatggg acaagcgtta gtgattagga aaacactata gtttgtacta tttacttgac 180
cgatgggtatc tttggtaact ttccagtcac ctgcaaagag ataagcttgt aaatacaacg 240
aggatagaaa caaacaata acttgtcctc cacntagaag atatacaact ccaagtagaa 300
cgagtgcacac ttgtacattc tttttggatg ggaactgaaa ttgttgcaca cttgcgcaag 360
agataggtaa acagtatata atanatacca ctac 394

<210> 320
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-B7

<400> 320

acaaaatggt atttaaagga cggcaagact tggctctatcg aataccagaa ctccaactac 60

aacattgaag tggaagtgaac agacaagaag caatcggtat atatataatcg ttgtaatgac 120

accgtagtaa aggtaactgg aaagtgaac tctatcacca ttgatagttg caacaaatgt 180

ggagttgtat tcgaaagctc tttgagtact tgcacagtgg tgaattgtcg ttcagttcag 240

ctccaggtgg agaaacaagc tccgagtgtg acgattgata aaaccgacgg cgcaaataatc 300

tttataccat caagtattgt ttcggaaca caagttgtta cagcaaagtc ttcattccgtt 360

aatgtaactg tcacgaatga tgaagaagat cctgttgaat ttcctttgcc tga 413

<210> 321

<211> 467

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-B9

<400> 321

gggacggccc acgcgtccgc ggacacgtgg ggttctagat cgcttgctgc caaaatggga 60

tcccgggcgt tcaaaatcga aaacaattcc tgaagcatta gactacagtg agaatcaaatt 120

atcggataat aactgggaag aatattgaaa gctggaattt tctgctgatt actacggttg 180

ggtcgactgg agggattgat gactttttta aaattcgacg atctgctggt gattggatgc 240

aaacgcttcc aaaatgggag tcaaacccca tctatcggtg acgtccaacg atgcaccgta 300

agaaacgaac aattgtacca attccatata accttcggct gctgcatat gaagaggagt 360

tcgctggtct tcgtccttca aacagacgag tgctggattt ctctgtaaat aataaccaac 420

ttgttgctg tttcctgaat aaatactgtc caaaataatt gctcatc 467

<210> 322

<211> 403

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-007-Q1-E1-C1

<400> 322

cggacgcgta ggtggttgtg ggaaacaaca gctttgttgg tgtaactggt tgccaatggg 60

tttccaanaa gaaagaaaca anaaacttgg gcaaaccaac ggtttcaacg tttggaagca 120
 acgttttgac tcaaagccaa gtccaaataa agaagatctt ggaggccatc aaagacttgg 180
 ttaacgatgc aaactttgac tgttcggctg aaggtttatac tttgcaggca atggactcat 240
 ctcatgtctc cttgggtttcg atggttcttc acgctcaagg gttcgaaatg ttccgtgtgc 300
 aacgagctgt ttctctgggt atcaatctgg cgtcgttaac caaaatatta aagtgtgcag 360
 gaatgatgac agtataacgc taagagcaga cgacaaggga gat 403

<210> 323
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-C10
 <400> 323

cgggtgcggat attccgggac gggccacgcg tccgaaacac aagacaacaa tgtctcgtcc 60
 caagtgtttc tttgatattg ctatcgggtg acaacctgca ggaaggattg tattcgagtt 120
 gttctccgat gtcgttecta aaaccgcgga aaatttccgt gccctgtgta ccggtgagaa 180
 agggtttggg tacaaagact ccaagtttca taggatcatt cccagttca tgtgccaagg 240
 tggagacttt acacgcggcg atggaaccgg tggcaagagt atttacggca ccaagtttga 300
 ggatgaaaac ttcaagttga agcattcgga gcccttttta ttgtccatgg ccaatgcggg 360
 accgaatacc aacggaagtc agtttttcat tacggtagtg aa 402

<210> 324
 <211> 358
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-C12
 <400> 324

cccacacgtc cggtttcgtc agtttctttg ggagaacatc ggacagatta ttcgtcctga 60
 ggagtgtgaa attttatcct atattcccga ataacaattt gaaccaaaaa atttcttgcg 120
 ggctctgtgg gtctttttgt acttttttta tcanaaaaaa tatganaaaa gattctgttg 180

tttgcgtgta cgctgtccac ccgtcttgcg gacgattcgg agagcgtcaa cagtatggat 240
gaagaagact ttggcaaaga aagttccgga ttggaagctc cttttgctat gtttgagaca 300
gtcatctaaa ttgtttatgg tgacttgat atagtagttt gtgagttatc gtaacaca 358

<210> 325
<211> 402
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-C2
<400> 325

cacacgcgtc agncacgcgt ccgctaaact ggttggtggg agaaatcgcc aactttggtg 60
ccaagtacga acgattcctt ggataacaac ttgttggttg acttgggtta aatattagta 120
tttacaagaa tggttagtgt ttcgggtcct cctcgaagaa ttataaaggt tggtaaagta 180
cagtgggtgac ttgagtatta agggcaacaa cggtaggaga cggaaaagtt acttcaggat 240
ccagttcctg gaattagtgc tgttcctcac gaagacaatg ctcgttattt caatgtgatt 300
atccagggtc ctgattcttc cccttatgaa ggaggaacat tcaagttgga gttatttctt 360
cccgaagact atcccatggc tcttcccaaa agtcgtttct tg 402

<210> 326
<211> 381
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-C3
<400> 326

actatttcta gttggttaata acaataaggg aatttcaaag taaggataaa atcaagtgga 60
atgggggtggt ttaacgcctc caattcccaa tccaatgggt ggaatggctc ccaagtttcc 120
aaaacttccc cgtccaagaa aaattcaacc aattataagg tctggtagaa acaccagaag 180
gagatcccca agttttcacc aattacgtga ttgtaaaagg aaacttgtgt aacaaagaga 240
cagaagagtt cctcaaagtt atttgcctc aagtacagat taccaaaggt gatatggaca 300
acgtgagtat atgccaccta cggaaaatgt caagttggaa actttataaa aaggttcagt 360
cagaatatcc ggaacgttgt g 381

<210> 327
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-C5

<400> 327

agcttatcgt tgttgtagct caccaactgt ccatttttat cccaacacaa aagttttatt 60
 acaccaaccc tctttttgcg tggtagtaa aacaccgcat ttgccccatg agacaacgga 120
 aaccagcacc acatggtagt ttgtccatcg cttcacgggt tgtggaacaa caagaacat 180
 ccaataagca cctaggacaa gattttgccg ttcaaacaga cctattgcag tccgactcga 240
 gtgagaactt gaaaggggtt attaaaacga gaggttggtt gactcctgat gtgccgtttg 300
 tattttggtg gtccggagat atctattcgt tgatagaaga tgagcctagt agacaccttt 360
 ttgagtttga aggattcaat tatggacgaa tgaaaagagt agatggtggt tggagactac 420

<210> 328
 <211> 387
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-C7

<400> 328

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaataaata aagaaaaaaa aaataaaaaga aataaaaata aaaaaaagaa 120
 taatgtaaaa taaaaacaag aaagtaatta aaaaaaaaaa atgtaaatca cgtgggtttt 180
 gcataatgtg tttaacgagt taaagaggaa gcatggggat ttaaaaatct ttatccagtt 240
 accacccttt gctatttgat cttatgcttt tcaaacgacg tatgggtgaa ccattatctg 300
 tgcaaaaaga tttgccccat atggcataac gcgttttttg ccaatcagag ctagtgatag 360
 ctggtcctcc tcgatggcta tctaaat 387

<210> 329
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-C9

<400> 329

cccacacgtc cgggtgtggt tacaacgtcn ccttgattcc tcatcatgtc ttcgtggtct 60
ttagaacaaa gttggagttg gctacttgac aacttttcag agtttcaatt acatactctt 120
ggtacattca ttatccatga agtatgttat tggggtagtt atgtgccgtt tctattgttg 180
gatgccattc cgtactttcg aagggtgaaa atacaaagag acaagggttaa tgatgcctcc 240
actcagtgga actgtatttt aggagtatta agaaatcatt ttttgttagt gttgcctctt 300
attattgtga cgcacccctt ttttgctggg atgggaacgc gagatgagtt accgctgccc 360
tctgtcggag agattgcttc tcaagtgttt ttattttttg tcatcgaaga ctttattttc 420
tattggggac atanagcgtt gcatactcct tatc 454

<210> 330
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-D1

<400> 330

gcttaaggac ggtgctagtg ctgctctttg gacttgccgc ctatttctct atacagttgt 60
gttagcattt tcagcaacaa taattggact tgatggaagg aaggcagata acatatggaa 120
cgatgcccta tattatcatg gaaaagtggg gaacttttgt gcatattcgg cttcgtctgt 180
ttttgaaggt ggcgaccatg gcgcagttaa atatgtgatg gctttggctt ctatcagctt 240
gatttttagtt ttctttcttt ggttggcctc ctttgtcgac gcattgtatc caattcttac 300
aaagttctgg tttgtggagc ttggtatcaa catattcctt actatgtggg ggttgggttg 360
tgcaattgtg gtgactgcaa agcgaccttc tagtggtgtt atggatg 407

<210> 331
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-D12

<400> 331

gtgttaaacc cagtcaagga cttacaaacg gccaaagctt atgcgagaag agtaaaagaa 60

gcagtggaga agagaactac ggtcgaattg cccaaacaag atatttgtgt acgacgtagc 120

gacgggaaga aacacggagt ggtcgctacg agaggagaag atattgagtt tgctcaagat 180

acagcgttta caaaggcagg taccgtcgga gtaaaagttt ggctgagaaa gaaaccgtac 240

tggagattgt agaaggagga acagggagca gcggggcatt cttagaaaag cgaggctttc 300

gctgctaact tgctagtgc aatcgtagtt caatgacttg gtcaacagct cttccgcttg 360

cttttgcaaa taaagacaca agctccgctc ctgtttgtgt aaaaaagaaa aganaaaaaa 420

gaggaaaagg atgaaaatga agagatatct 450

<210> 332

<211> 420

<212> DNA .

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-D2

<400> 332

tacggccgac attccgagtc caccacgcgt ccgataaccc tgatacaagt acttcgtttc 60

cttgatttca ctgcgccata ctggaatcca agtttggcat ttgtgatggg atcggcccta 120

attttatctt tgctgcgtt tgcgttttta agaaagagaa acaatcgacc tcttttatct 180

tcacattcct atattccttg tgttgcacaa atcgatataa aagtgattct tggcgggtgtt 240

ctgtttggtg ctggttgggg cttgggtgga ctttgccctg gtccaactgc tagttagttt 300

ctttagtctt ccggaacagc gtgccaacca catagttact ggatccatga tattgggagc 360

attgctgtat cagcaaatga ctaatttggg agagaaatcc cacggtgatt ccaaaggaga 420

<210> 333

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-007-Q1-E1-D3

<400> 333

cttatTTTTgg cttacttgaa tgatggtaca attatgacca tctcaaagga caaagtcaaa 60
 ccatcacctc atccaaatcg ttggaacttg ggtgaagtgt ttntccttgc aacggcactt 120
 ggctgggtggc tcactgcagc aactctcatt tactttacaa ctttgtacaa gacatctttc 180
 tggacagata cttttcctct gtacgcagat tggaagaatc ccaagttgct cgctataagg 240
 cctccatact tcaattatgg tcttcaaaat agttttatgc taaagtctct catctatctg 300
 caagtatcta tgattggaca agctcttata ttctgtaccc gtgcatactg gatgttcttt 360
 atggatcgtc ctggtatctt attgatgggt gcattttgta ctgcac 406

<210> 334
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-D4
 <400> 334

aacacgctac cggtccttt aatttgcaa ttgcagggaa taattcacgc ttgattattg 60
 cttaactttt tggcggtaat ttcaaggctc gcttcttcgt tcggccggaa ccaaaatatt 120
 atattatata ttttgaacaa gggaaatata aatcgaagat tctaaaactc tgttggacaa 180
 ctaatcgaaa agaactccaa agagcgacct cataaaaatg ctataaagtt tctagaaaca 240
 accaaagaag aagctatttt ttttacgttt gcagaagtaa agaaacatgt gaacgctgtt 300
 gcgcaagggt tgttagaact tggctttggt ccaggaaaga agatcgcttg ctgtcttcca 360
 cttggaagcc cagagtttgt gtttactttt cttggttcgc tacaatcacg 410

<210> 335
 <211> 430
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-D5
 <400> 335

accacgcgtc cgcccacgcg tccgcgcttg tttttcgagt gcgtaccgtc gtccaagaaa 60
 agaaaccaga gttggtatcg agtatgaata atagtttcag tggtggttgc cactctatgg 120
 ttgtaggggt tccagcgttt caatgtacta taccgttggg gaagaaacct ggtggttggg 180

atagtactag gacgaacggt tgttggtgca agacgaggtg gaacaagaca gacactcgggt 240
ggacaataat acacagtaga agaaaacca atgcttggac ccgttggttg aaagcgagtt 300
ctacgacttc caaaaatgaa gacgacaaag gggatgagaa caacanagga aataacaata 360
gtggaggaaa aggcggaggt tttccgtttt ctatctttgg cggcaattgg tcaccacgga 420
aaaacaaccc 430

<210> 336
<211> 411
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-D6
<400> 336

gacatttgtg cagccttgtc gtctctttac tggacgttgg aatcctttga taaaggtatc 60
atcttgcttt aaaatatact agaatggttt catattattg tctactatgt tgggatgggg 120
gctcgctcca actcttggtg tgttgccaca aatctgtact ttttgcgagc ttctgcaagt 180
cttcacaaa agtcaaaagc aatacctttt ctcgatcgtc cgcttgcttt ggatgggttc 240
atgggtggcg atgttggttt cgatcctttg aatatctcgt cctatttaga cttgcgttgg 300
ttacgagaat ccgaactcaa aactgtcgc attgctatgt tggctgttgt gggttggttc 360
gtacaagaag tattccattt tacanatcan atatatagcg cttctgatcc t 411

<210> 337
<211> 375
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-D7
<400> 337

accagacatc ccgaggatta cttccttgca ccctaaatat taccttaata tacggcctac 60
aacacggagc agagttccaa agtgtgtagt gtcgaccac ttgcaaaca ccttgcaaca 120
gggatggtat caggggtgctc gtcaaaactc tcgtccattg cacaatcggt ttcagacctg 180
gataacggcc ttgacaactg aacgcacatt tcatcgtaga gggtctggta gtgggttctgt 240

tgggtggtggt atgggtggtg gtactggtgg tggatcaagt aatgcaagag ggaatggaca 300
 acgtcgcggtg catccccgca tgcctttctg gctgcggtac aatccacggc cataatcgcg 360
 tccttcactg accac 375

<210> 338
 <211> 302
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-D8
 <400> 338

aagaaactgc ggacaaatat caggaaacgt ccttatccaa actacattcc atggcagtat 60
 ttcaagacat atccttggtg gtatggatca aactcggtcg agaaaacaaa actcgattgt 120
 ctggtaaaag acaagcagag atacagcata tcttaccaga tttttttgta taaacattct 180
 atagtaaata ttgatacaag gggttgttat ttgggttttg actggctgcg gttccaaaat 240
 agggccactt gcttatcaat gcatataacc aaatgataaa aataaaagag agtttcatat 300
 ac 302

<210> 339
 <211> 490
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-D9
 <400> 339

cgggcggaag tccgggacgg ccacgcgtcc gccacacgt ccgcccacgc gtccgcccac 60
 gcgtccgccc acgcgtccgc ccacgcgtcc gcgaatttgc tcgagaactg tttgaaaaag 120
 cactacaagt agatcctcat tcagcaccta catatcaagc atttgggttg ttggaaagtc 180
 gtcaaggcaa caaagatcga gctaggcaat tgttcaagcg tggactagga gtgaatcctc 240
 aacatagtca tttgctacat gcttgggctg aattggaaga gtcagcaggc aattttgagt 300
 ttgctcgga attatatgat tggggcgtaa aatcggagtt tccaagtgt caagtaactt 360
 tgaaatcttg gctaaaaatg gaaataagtc ttgggtatct cgatgagtct atgtcaaagt 420
 tattaaatct ccgttcaacc gccaaacaag ttgttgaaga gctgagaatt atgcgcaagt 480

tacttgaaag 490

<210> 340
<211> 380
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E1

<400> 340

agcaagttgg acataggagg actagttgac ccgaacttcc gaacgggtcc ttttgaactt 60
gcggtgaaaa agataacagc gttctcttta acagcgcttc gtttagttgt tttatcgagt 120
gctgcagtaa caaggttaga atggaacgag aatcagcgca agatatatgc tggttctttt 180
aatattccta ttgtacagtt gaatcctgga aatatcttaa atgaaaagaa aaagggtgaa 240
gatgctgtgc gttccagtgg tataccgtat tgtattattc gcgctactgg actgaatgat 300
gagcatcctt gtggaagaat cgtatttcaa caaggagata ctgcagttgg tagaataaat 360
agaaaagatg ttgcagatac 380

<210> 341
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E10

<400> 341

gaaaaccaag tgaggaaaag aaggcaagta gagggcggcc cgagaaagga gagggcgtaa 60
gacgtgatac agagtaggaa gaaaagagaa gagagctaga aaggaggtaa aagaagagta 120
aaaggactag aagaggtacg gaattcacga ggaaggagcg tgaaggaagg aggaatccca 180
agtaatcgag gaagaaaaag cttcggtgaa agcgtgaacg gattttgtac aactgccccg 240
tcaagttctg gaagtgtgct aggaataagc aggagaagta gaagagagta ggaaaagaag 300
aaaggaagtg aagacgtaag acgtgatata gtagtaggaag aaaagagaag agagctagaa 360
aggaggtaaa agaagagtaa aaggactaga a 391

<210> 342
<211> 449
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E11

<400> 342

gggacggccc acgcggtccgc ccacacgtct gccacgcgt ccgttcaaca tcgtcgttgt 60

ggacatatcg tcgtcagagt tatggtagtt tcagagatag tagcggcaac gtttatttat 120

gtctgtggtc tccgcatggc ttataggata attctcagag gtgaaaagaa attgcgcaac 180

tacttgccctt tgcagaccaa aagtggcgca tactactccc ttcagcgacg attcttgcg 240

agagttttca aggccattca cattgccatt caatatacac aaaactggaa acggaataga 300

gccgttacta gtaattatcc agactctcgg aaataaacat gattatcaca acaccacgt 360

caagacggtg gtagtttgtc gacgaagact tccactagtg gatggaaaac tagtcaaaat 420

cacgttcggc gacggttaca ggggggatt 449

<210> 343

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-007-Q1-E1-E12

<400> 343

gacgaatagg aggaatgtgg tttcgtcatt tacttcctct agtaagccgc tttcccatca 60

agggagggtta cagacgcttg agttctactc aacaagaaac ttctttaccc gctaacagaa 120

ggaagttact gtatagaagt aaacaaacag gttttcttga actcgatctt atcctgngaa 180

actgggcgga agaaaatctt tcaaaacttt cagaagggga aattcaagaa tacgagaaac 240

taatccatcg tgaagttcca gacttgact cttggctaag tggacagcaa gagcctccag 300

aagaacttga cggaaaaatt tttcgtcgca tccgagattc agtgtggaaa ggtacaatca 360

ataagagtaa aactac 376

<210> 344

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E3

<400> 344

accacgcgtc cgacacgcgt acgccacccg tccggaagga atggcaacaa cttcggtaaa 60

caacagatat gaacattatg gacaaggacc aaacctactt ttcaaaattg gatggcaaca 120

tggccaaaaa ctgggtaaat ttgaacaagg actttcgaac ccataaaccg ttatcaaacg 180

gcaagatcga gttggcttgg gagccgaaca aaagacagtc tggagtgact tgtggtggga 240

aagatatcta tcggaagcaa tcaacaagaa tctccaacgt ttgaaagat ccacgacgga 300

aaaaggtgaa gacattgcag aggaaagtac tgtctcacga aaagaacgga agaagaagaa 360

gaagaaaagt agttctcggt cgaagaaacg aaaagaaaga g 401

<210> 345

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E5

<400> 345

atactacaat gggaaagtta caagtaggag acgaagcacc tgactttgag ttgaaagacc 60

aagacggtaa tatagttaaa ttgagcgagt tcaaaggaaa atatcctgta gtcctattct 120

tttatcccaa ggacaagacg tatggctgca cacgtgaagc ttgcagtttc cgagataaga 180

tgtcggaatt taacgaactt aatgcgaaag ttttcggtgt gagttcggac agtgtagagt 240

ctcacaagtc gtttgccgat gaacaaaagt tgacgtttcc cttattatct gatgaaggcg 300

gtaaagtacg caagctatac ggtgtaccaa agagcatggt tattatgcct ggtcgtgca 360

cttatgtcat tggtcgggat ggtattgtac gacacatcta c 401

<210> 346

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E6

<400> 346

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agaagtatac aggaggtgac ccacgagaa tgaaagtgtc cgtggagaaa ctagacgaag 120

agcagggtcc acttcataga agagactatt gtgcacattt gtatattcct ttgcgcggtt 180
 gtttgagaga caactattht ttgccgtggt cttgtgagga agagaaggag gcgtataacc 240
 ggtgccaaag aaaagagaga agaagaagag aacgactcta taagaaaatc aaggaagagg 300
 cctccaaagt atcggcgacg gaagaacaag atgaataata tcgtgttggt gcgtcgtctt 360
 tgtgttgga caataataac tcctcaaata gtaaacagct tgatttgagt ttcaagttta 420

<210> 347
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-E8
 <400> 347

accacgcgtc cgcagggtact cgatgagaaa ggagacccaa attaagggtga gagaatggac 60
 gataaggaac taggcaaaag gatatggtat ctgcggtaga acatatgaaa gaagcagcac 120
 cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtagag tatagagtgt 180
 gcggcctgcc aaatattaga gaagaaatcg atgaaagtga aagcgagtaa aagatgaggt 240
 atagagaatg gcggtcctaa ctgtaaggat ccaaaggtag cgaagtaa at agacgtttga 300
 aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt ctatcgtcc aactcagcga 360
 aacagcaata actgtgaaaa tgcagtaaac tagcagtatg actgaaaga 409

<210> 348
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-F1
 <400> 348

gagcaaccaa gtttgtgaag caagtgtgga gttganatat ttagaggcag tagagaatgt 60
 acaggaaata tacanaaata ttccagagag tgatctattg gagttgtatg gtctatataa 120
 aagaataaag gatggagaag ctcttttaca gaatcttttc tatttctatc aatggaaaga 180
 aactgccaag tggaagagtt ggaaggaggc aagtaataag tattcaaaag aggaagctat 240

gaagaaatat attgcactga gtgaaaaata tcacaagaaa gattccaata caagttatac 300
 tgggaaacag cctttaagtt tcgagttgcc taacagtga gaagagcaat cccagaaacc 360
 tgttttggac ctttggttatt ttactg 386

<210> 349
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-F10
 <400> 349

cccacacgtc cgggtggtgg cgacgttggt ggctcctatt gatagacagc tgttatgtcc 60
 ttttaataaac tgttgaaaac attggctgat agatatgcgt ctcaagcagt tccaacaaag 120
 actgtggaag gttgggaaac aaccgctgat ttacgaaaaa agttgattgc gactcatatt 180
 aacgctctcc ctgttcgttt ccaacgcgca agagaagagt tgaaggattt tgtacaaaag 240
 actcgtacgt tggactttac gtatcttgat gcgtttcggt ttggtttccg aagcttagag 300
 ttggcggcat ggtactggat cggaaagacc ttggggaaga gggaacttcc caactcgata 360
 tgaaatgtgt cttcggcaac tcttcttttc tcggaaatac aagcttttat gtgctcgtgt 420
 tttt 424

<210> 350
 <211> 304
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-F11
 <400> 350

catcgacaaa gttgagaatg tcacaaggtg ctgttggtgg cttgggagtg aaacgattgc 60
 ttgcgcagta tcgagagctt gaaaaggaac aacataaacc tgatagttgg tttagagctt 120
 atcctttaca ggaagaccta tttgagtggc actttactat aaatggacca gaaggacttc 180
 cgttcgatgg tggtttttat cacggaaaaa tactgttgcc acctgaatat ccttcaagc 240
 cacctgatat cgtcctgcta acaccgaatg ggcgttttga aacaggacaa cgtatctgcc 300
 tgag 304

<210> 351
 <211> 376
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-007-Q1-E1-F12

 <400> 351

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 gagtgtgaagg cggcgtcata atagaaatcc gaaaagagta aaagaaaaga gagagaagaa 120
 agaaaagaag agaaaagccg tactgaaaac cgacacaggt actcgaggag aaaggagacc 180
 caaattaagg tgagagaatg gacgataagg aaacaggcaa aaggatatgg tatctgcggt 240
 agaacatatg aaagaaacag caccgactgt ttagcaaaaa cacagcactc tgcagaaaag 300
 agaaaatgta aagtaaagag tgtgcggcct gccaaatagt agagaagaaa tcgatgaaag 360
 tgaaagcgag taaaag 376

<210> 352
 <211> 363
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-007-Q1-E1-F2

 <400> 352

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 tcatacatcc ttcgaagcat atctaaatgc tccgaggaaa ctcttcaga agaagtcgcc 120
 ttttctgaag acaaaacttc ttcttcacct tgtacagacc ctgctggtgg attgtctgtt 180
 tcaacacctt caacgcttgt actctcggtc gttatttcac cgacctctc tgaagatgag 240
 ccttggtctt cttgttgtgt ctgattttct agtcttttac gaagactgct taataaatcc 300
 tcgtcacgaa caggagaatc atcgtctgat tcaataaatt cccgtttcaa ctgttctagc 360
 ctt 363

<210> 353
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-F4

<400> 353

actgcttcag gtgcaacttc aattttacccg ttgcttcaaa ttaaaagaaa ctatacttta 60
acagtgcaaa ccataaagct ggctaattcta acagacgtat acaacagcag tgtattgggc 120
tttacctttc ttgcttccaa tgacactgct tggaacaat caagagccaa tgtcactggc 180
gcacttagtg cagcaaaaca aaacgtaaca ggagcaatag cgtttctaga acgcttgata 240
gcagcaagca cagtgaataa aacgggtggag tttagtaagc tctctagtgg tacgaaggag 300
gttgtttcgc tggcagggtt accgcttaat ttcacgaaaa attctactgg agactttgtg 360
gaagggtgac cggtctctgc tgctga 386

<210> 354

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-F6

<400> 354

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ttcaagtgca accaagctat ataaaacagc ttattctggc tcatacagaa gaaacttgcg 120
caactctcgt ggttatctgt ggattggtgg tttgtttga ctctcagctt tggccacctg 180
gtactgcac caagtcaacg cagattcaca ggccgtcaag gaaagtgttc aaaaactaaa 240
tcctgaagat ttcgtgcctc tccagctgat ctcaaatact ccttataatc acaacgttgc 300
aaggttgcgt tttgctattc aatcttcaga aagtgaagac tttcctgcag tcagcctcgt 360
ccaagtaaag acaaaagatg agcaaggaaa cgatgtgatt cgtcct 406

<210> 355

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-F7

<400> 355

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gacgatattg ttgccttggg tattgacaat ggctctggta tggtgaaagc aggagttgca 120
 ggggacgatg ctctcgttc cgtcttcctt tccatcgtag gtcgaccaag acaccaagct 180
 attatggttg gtatgggaca aaaggaaagt tatgtgggtg atgaggctca gtctcgaagg 240
 ggtatactct ctttaaaata cccaatagaa cacggtattg tctaataattg ggatgatatg 300
 gaaaagatat ggcaccatac tttctacaat gaacttcgaa ttgcacctga agagcatcca 360
 gtcttggtga ccgaagctcc tctcaatcca aaggcaaaca gggaaaaaat ga 412

<210> 356
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-F8

<400> 356

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 gtgggaagca agaagagatg agtagaggaa gtagtgccgg ttatgatcga catattacta 120
 ttttctctcc agagggacga ctatatcaag tagaatatgc ctttaaggct gtaaagtcag 180
 taggaattac caccgttgct gtaaaggggc tggatgcagt ttgtggagta actcaaaaga 240
 aggttccaga taagctcatt gaccctaaat cagtcaccaa tgttttccga atatcggtac 300
 accacggctg tatttttact ggacttgcaa cggacgcaag ggcacaacta caacgaacac 360

<210> 357
 <211> 365
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G11

<400> 357

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 atggagcagt tgaggaaata tatcgatata catcatggag gttactggaa acgtttagaa 120
 agcctcaacc agaattaata tgaacatatt aatgaaatag aggaattgag tgttctaaag 180
 cattgctatg aacttgcaga aaagagagaa acggttgcaa tgcaacagag attgtcatcc 240
 aaggagcgcc tcaccaacga gttgaagcag cgagaactag agttgcagaa acagtatggg 300

gaacttttaa tagagcgaga tagacttttg tcaagaaagc tttaacacac aaaacatcta 360
cgtat 365

<210> 358
<211> 338
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G12

<400> 358

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gcagtttgta caattttgta tgggtgtttta tctccttatg gagttgcaaa actgtcgttg 120
ttgcaattgg cctttgtagc gtcactcagt agtaaaactgg ccgatacagt ttcaagtga 180
ataggaaagg catatgggaa gcgtactttt ttggtaaacta attggaaacc cgtaccagct 240
ggaacagacg gtgaagtcac cctggaaggt acccttcccc gattattgga aaaacggaaa 300
tgtcctattg ggccctgggtt ggccggtgga aaaatttt 338

<210> 359
<211> 250
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G4

<400> 359

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ttgtgaacct gattgcttg tatgataatg agtggggcta ctccaatcgt gttgtagatt 120
tggtgcacca tatggcgaaa gttgatggtg tagcttaact ctgcttttct tgttggtttt 180
tcgtgtattg tttgttttgt gaaagagatg aaatgtgttg tcttttccat aaaaagttgt 240
gtgcgctgtg 250

<210> 360
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G5

<400> 360
aagaaagtgt actacagatc acatttcgat ggcaggacct tggctcaagt atcgagggtca 60
cctggataat atttccaaca acatgttcat cgggtgctatc aatgcggaaa atggcaaggc 120
caattatgtg aagaatcaat tgactgggtca atatgggtccg gttcctgata ctgctcgtgc 180
atacaaagct gctggattgc catggattgt tattggagat gaaaattatg gagaagggttc 240
tagtcgagaa catgcagcac tggaacctcg tcatttggga ggtgttgcta ttttgggttcg 300
ttctttttgca agaatccatg agaccaacct caagaagcag ggccttcttc ctctgacatt 360
tgcggatccg gcggattatg atcgta 386

<210> 361
<211> 400
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-G6

<400> 361
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ttctctcttt ccttatcgct gccgcagttg cagccgacgt agtttcagag gagagatggg 120
gatatgctca gcaaaccxaa caacagcaac agtgccaaca agtatgtaaa cagtatgcat 180
actatcagag tccagtctgc acttccgtaa ccacacagag ccatactgg acccaatgct 240
cgaagactgt gcaaaccttt gtcccaagcc agtgcagtac ttataccxaa tctcctacat 300
ggacctattg cagcacctac accaccacta gcgtaccatc tcaatgcagc aaggccgtga 360
ctacctatac tcaaacctgc tgtgcttatg cccaacaaac 400

<210> 362
<211> 395
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-007-Q1-E1-G9

<400> 362
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ttttcttctt ctgggacgatt cttttcctta cgagatcgat catgtcacia caacataaag 120

ttgtctctcc aacaggttta gaggaacag actcggtaac actgacacgt tttgtcttac 180
atgaacaacg caaacaccca gagtcccaag gagacttgac cttgttggtg acttccgttc 240
aactggcgtg caaagtgacc gactcttggtg tgagaaaggc aggtattgcc aaactatatg 300
gactagctgg aggaggtaat gtttctgggg atttacaaca aaagttggac gtcatttcca 360
acgaaacctt caaggtaaac atcgaaagta gtcaa 395

<210> 363
<211> 369
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H1

<400> 363

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gtgtctatag aagaaatttg gatttgggca attcgatgcg ccaagatgat gtaatgacgt 120
gaacaagggtg cttgtgaaca acttggtcac tatgattttg ttgttctctt caaagtcaag 180
gagtttttag taaacatatt cgttccctta gctttacaat tcatggacac ctggtgccac 240
agttctttgt ctgcaactct cttggagggt ttccccgagt cgttaccacc aaagtttttg 300
gtggagcacc tgcaccagtt gcttgttggtg gacctgcgtt gctctcaact gtacagtttg 360
ggacacatt 369

<210> 364
<211> 453
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H10

<400> 364

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caccgttgcc gctggtttta caactttagt tacgagatac aagcatgtat ttagtatgtt 120
gagagctaga tggtttaggg acgtgtttga agatttgccg ttaagacttc gagcaagtga 180
agccgccgcc ataagggaga gattggactt gctagaagct aaaatattgt cttcaagcaa 240
cagcagtaga ctttctgttc attcgctctg tacacttgca gaagagaaac ctattcctga 300

gtgggatcta gttaccagag aagatttcgt tactcttcga acgagagtag atgatctgtc 360
 caaagagttg actagtatca agtcccaagc tgacaagtct ctccaagtat cggaagatat 420
 gttgcgtcaa tacttacaaa acgcagtttc gac 453

<210> 365
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-H11
 <400> 365

cccacacgtc cgcaagaagg tgttgcacgg ctgtcgaaag aacgtgctgt gaagtgagag 60
 aacgtacgag aaagccaagt gaggaaaaga aggcaagtag agggcgggccc gagaaaggag 120
 agggcgtaag acgtgataca gagtaggaag aaaagagaag agagctagaa aggaggtaaa 180
 agaagagtaa aaggactaga agaggtacgg aattcacgag gaaggagcgt gaaggaagga 240
 ggaatcccaa gtaatcgagg aagaaaaagc ttcggtgaaa gcgtgaacgg attttgtaca 300
 cactgcccgt caagttctgg aagtgtgcta ngaataagca agagaagtag aagagagtan 360
 gaaaagaaga aaggaagtga agacgtaaga cgt 393

<210> 366
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-H2
 <400> 366

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 cgtgaaggaa ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa 120
 cggatthttgt acacactgcc cgtcaagttc tggaagtgtg ctaggaataa gctatataag 180
 tagcgtatgc aggaagaag aaggtaaagg aagagaagga agaagcagag agggactatg 240
 agcgagaagg tggatagtcg agagggaaaa agcccagaag ccaagataag gtatcaaagt 300
 aaagaaagaa ggaaaaggag aagaagagag ggtaggctta gaagcagcaa accagagagg 360

<210> 367
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-007-Q1-E1-H3

 <400> 367

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 tggtcggcca acatggaacg tatcatgaag gcacaagctt tgcgtgattc gtccttggca 120
 atgtacatgt catcgagaaa gataatggaa attaatccca acaatgccat catgcaagaa 180
 ttgcgtcgcc gtgtggaagc agacaagtca gacaagaccg tgaaagactt ggtcaattta 240
 ttatttgaca ctgcattgtt gacttccgga ttctctcttg acgatcccaa cgtttttgcc 300
 tctcgtattc atcgcatgat taagttaggt cttagcattg acgaagatga agtcacagaa 360
 aagatggagg aagaattacc ccctctcgag accgaacaag 400

<210> 368
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-007-Q1-E1-H4

 <400> 368

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 tgtgaaagtg actattgggtt ggcatacaat ataatatctg ttggttactaa gttgcaaaac 120
 acaataccaa aaaggatgct tggattgtgt tggacggaaa aatatatgac gtgactcggt 180
 ttctggacga acatccgggt ggagaagaag ttctacttga agttgccggt atgtgttatt 240
 tcgaggaaag atattcctat ttccgcgcaa atatcataat aataataacc atatgttagg 300
 gcgtgatgct acgagagagt ttgaagacgt tggtcactcg gatgaggcaa gagaactacg 360
 aaacaagtat ttcgtgggag tagttcgtag tgaaacgaaa gaaga 405

<210> 369
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-007-Q1-E1-H6

<400> 369

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gtttgcaaag ctcttcctta tattctttgt gcttggacaa tggttgcaaa gactgctctg 120

agttgcctct ttctctcttt ccttatcgct gccgcagttg cagccgacgt agtttcagag 180

gagagatggg gatatgctca gcaaaccxaa caacagcaac agtgccaaca agtatgtaaa 240

cagtatgcat actatcagag tccagtctgc acttccgtaa ccacacagag cccatactgg 300

acccaatgct cgaagactgt gcaaaccttt gtcccaagcc agtgcgagtac ttataccxaa 360

tctcctacat ggacctattg cagcacctac accaccac 398

<210> 370

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H7

<400> 370

agcaagtgga agtggcgtgt gactgttatt gggtggagcg ccaaactttg tttcctttac 60

ttttcatgtc cacgaaacaa caaagtcaag cagccttgct tctaataaaa cagctcaaag 120

agctaaacaa gaaccccgac tgtgggtttt cggcaggtct tgtagatgaa accaatcctt 180

ttgagtggca agttatttta agtgggtccac cagacacctt atatgaggga ggcggtgttca 240

aggcacgtct ggtgtttcct caagattatc ccgtcatgcc tccgacgatg aggttcactt 300

cggaaatgtg gcacccaaat gtctatcaag acggaagagt ttgtatatct atcttgcatc 360

caccgggaga cgacccgcac aactatg 387

<210> 371

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-008-Q1-E1-A1

<400> 371

gcgcagcaat atcgggctta cttttaaagg acgcttgtac tattcatact ggtgaatata 60

taagaggttt atttcagtta tgcatgcaat taggaagagt agaatggaga ccagaaattg 120
 tacgacacgt agaagatttg aaacagacca atgagtttca agatattgtg ttttgactg 180
 gagctgatat taactttatc ggtgggatat ctggacacgt atcgataact cgttcgtttg 240
 gtagaaactt ttattatcat cagggcgaaa caaatctacc gttaaagggtg cccatcatat 300
 gtggaaggta tctcaccgat aaagttaata tcagctacat acaaaaaaaaa aaaaaagggg 360
 agagtggagg aagaagaaaa aaaaaagggg ggg 393

<210> 372
 <211> 295
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-A10
 <400> 372

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 gggaagctcg ccaccaacta ctttattcac gggtagctgc tgctgctcgt taaaaaata 120
 aagtatccta gtgctcgacg ggataagctt tgagtaaaaa aaaaaaaaaa aaaaaataa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaca aaaaaaaaaa 240
 aagaaaaaaa tggaacaaga cctaaaaaaa tggggcagca agtccagggg tttaa 295

<210> 373
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-A11
 <400> 373

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 ctacaatagt caacgacgca ttgtaagaaa ttctctttcg cattcacaat ccaacacttt 120
 tttgatcctt ttcgtacatt ttggattgtg gcacacaaca tgaaaattcc tgtccgactc 180
 gtcaagtttt ctttggaata aaagaagcca acttgtttca acagaagtat aagtggaatc 240
 gcctacactt tttctcgcca tggacaggtt tctgatgtct tgaaaaagga gactcaaagc 300
 tatgatgaga agaaacttgg tccttcgcaa gtactcgtgt cgtttcttgc ctcaagtata 360

ggcacaacag atttggcgtg gataagaggt atgggaaaga 400

<210> 374
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-A12

<400> 374

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cctaaaacag tgtttttttg ggctcctacc atgaaatggg ctttggtggt tgcaggcctg 120
tccgatatga agcgccccc tgagaaactt tccgtacctc aaaacctagc tttggcttgt 180
actggagtta tctgggttcg atatagtttt gtaataacac cagtaaacta taacttggca 240
ctggtcaata cctttgttgg tgctaccggt atttatcaga tttggagaaa agtgaaccac 300
acctatttcc aaacaaaaac aagtttctgc taattgattc gctatgagac gtgatggagt 360
gagatatcga acaacttttg gtgtgtgaaa tccagtgaat atgaaagatt tgggtgtttt 419

<210> 375
<211> 392
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-A3

<400> 375

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tattgccaat acgagagctt ttggtatacc tgtggtggta gctttgaaca agttccagta 120
cgatacagac gcagaattac agctcgtaat aaagagatgt aaggaagcag gtgcctttga 180
tgcagttttg gccgatcatt gggcacaagg tggtcagggt gctatagagt tgggacaagc 240
tgtcattcgt gcttgccaag cagccaaaac tccattgcgt tttagttatg cattggacga 300
ttctctcata gacaaagtga aggccattgc gaaaaatggt taaaaagcaa aggatgtgga 360
attctccgaa gatgcaaaga ggaaaataga aa 392

<210> 376
<211> 379
<212> DNA

cccacgcgtc cgcccacgcg tccgcgacac tacattgttg tggagaaagt tgtgttttagc 60
gcacccgacg actcgggatt tgcagtgggt caggctcggg ttctggataa caacgatgaa 120
atgcaacatc catcgccatc ccaggatggc tcatcgttgc aaaacgaaac agagaaaata 180
acgattgttg gaaagcttgg taaaatagaa gaaggattgc atttggctgt ggaaggagta 240
tgggtaaacc atagcaagta tggtaaacag tttcagggtgc aggtggcaca gacagaacct 300
tttagccatg aagattattg atagacccat agtttctgtg taaagtgaga tgatagaata 360
aaaca 365

<210> 379
<211> 360
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-008-Q1-E1-A8
<400> 379

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tagcagctgc cgactatttg gaaagttgtg tggacagaga ctttcagtat acttttgatt 120
ggacgagtat ccatgaggct tatactcttt taagttcact agcgtttctc gtcgtttttc 180
agacgtttac agctttcgtg gataatttta ttcaacaaca ggaacgaaag gaggtacagg 240
aagagatgga acgattcggg cgctttttat caccaaaaac agaatataga gacgatgtga 300
gtttggataa agtggatgtg aatatgtgga aagcacagca accagagcgt tggttttttg 360

<210> 380
<211> 345
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-008-Q1-E1-A9
<400> 380

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gaactggatc ccgtgcttga tgcagtcgaa ccaagttaga agtcctcacg ggaacaagtt 180
tccaagtggg tacaccagca catgaaggat attagtggag aacatgaaca aatcgttgtc 240

caagaagaca ctcgttaaga cgtgggttcat gcatgagcga gtgcagcaca cgactttgac 300
gtcagatagg tggacagtca cagtcaacgg atgagaatct ctga 345

<210> 381
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B10

<400> 381

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tggacattg tttcgatgtg atatgggtta gcatatttga tatccaatat tcttgtttat 120
gttctttgaa tgccttgaac cagatgtgtc gaacctacag cgtgtctgtg ccggctggcg 180
atgactttga atttccaaac tctccttgct taagtgactg ggatctcggt cattttgttt 240
cccatagcaa cgaacctgta tttcgtgtat ttcacaagtg catcatgtgc tgcttttttag 300
aacaagaat agttgtcttt cgggatggcc tttgtatact gaaaaattcc aacagctggg 360
tgttggttga tgctttgcgt gaaatcacia aacatgaaaa ggacaaagaa aaccctgtcc 420
tcca 424

<210> 382
<211> 456
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B11

<400> 382

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cgttgcaagg aggctgagag tttggcagat agtcgtttga aagaactcca agaaacctg 120
gaagaccaa aaagacttgc ggtagagttg gaacgggtta agagcgagcg gtttagctata 180
aaaaaggacg atatcacgca aagtgtatt tattgttcat tggaagctgc ttttcaaaaa 240
ctacagctac aacagataga atgggaacga gaacgaggca acttgaagaa agagaaagat 300
gaattggaaa gaataatgga agagaaatac ggcttgaga ttcaaagact aaaaagaaaa 360
gcttcggagt ggaaacaaca gttggaagat gccattcata ctagtaatga agccaaaagc 420

caaagagacc aagcgcttat gcgttatgag gcgaaa

456

<210> 383
<211> 422
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B12

<400> 383

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gcagtaaaag aagaaagaga aaggaaaaaa ctggagtagc gaaacaagag aagggaagta 120
aaaggtaaga aagaggaaag gtttacgaga gaaggaagta gaaagaagag agtghtaaggc 180
ggcgtcataa tagaaatccg aaaggagtag aagaaaagag agagaagaaa gaaaagaaga 240
gaaaagccgt actgaagacc gacacaggta ctcgaggaga aaggagaccc aaattaaggt 300
gagagaatgg acgataagga actaggcaaa aggatatggg atctgcggta gaacatatga 360
aagaaacagc accgactgtt tagcaaaaac acagcactct gcaaaaaaga gaaaatgtta 420
ag 422

<210> 384
<211> 261
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B2

<400> 384

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atcgttcact aatgcaagct atttcgttca ctccgtagtc gggatccatg aagaaagact 120
gcaaggaaga cacaaagaaa cacaaattta tttcactgaa tcacaatgga agaaactcct 180
gctactggaa gctcgagagt tattttttcca ttttcaacta gaaaagttcc gactttctta 240
aagtaaagtc ccttccaggg a 261

<210> 385
<211> 350
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B4

<400> 385

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tcgtttcatg gtttcagaag cggggaaata ttggaaagga agcacaaggt ctttttccag 120
ttcagctggg acccagagga atgattggag gtcttctgta aagaagttat ctgttgctgc 180
cagcgtaggt gctgctgtgg ctgcctttta tggaattgaa agacatagga cagcccctat 240
ttcttgcaag gaggcataaa ctattgcaaa tggttccgtg aattatgaca aggtcagaga 300
agcaattgta aagatcattg tgcaggatga taagattgct cccaccatgt 350

<210> 386

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B5

<400> 386

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gagagggcgt aagacgtgat acagagtagg aagaaaagag aagagagcta gaaaggaggt 120
aaaagaagag taaaaggact agaagaggta cggaattcac gaggaaggag cgtgaaggaa 180
ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa cggattttgt 240
acacactgcc cgtcaagttc tggaagtgtg ctaggaataa gcagtcgagt agtagagtaa 300
gtgtaaaagg gaaaggaaag gagagaaaga ggaaagggat gaaatgcaga gatctctaga 360
gaaaggcaag aaagaaaaga aaggagagacc cagt 394

<210> 387

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B6

<400> 387

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gtatcataca aaagctgaac aaagattacc ctgatcgaat aggatttagc gtaagtcaca 120

caacaagacc accgcgaccg ggggaacaaa acggagtaga atactatattt gtttccgagg 180
 aaaaatttaa aaaaatgata gagaatagtg aatttataga atatgcgaat gttcatggaa 240
 attattacgg aacaagtttt caagcagtag agagtgttct caatagagga aggctgtgtg 300
 tgctggacgt agacgttcaa ggatgccgtt ccattcgtcg gagaaacatg aaagctataa 360
 taatatttgt ttgcctcc 379

<210> 388
 <211> 224
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B7

<400> 388

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 gtctcggcgg gagtctaacg ggattgcagg tttaagtccg tctttaaacc tcttctgttt 180
 cggcaaaact cttacgtaac ttgatttaaa ggcttggtt tttta 224

<210> 389
 <211> 361
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-B9

<400> 389

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 atatatatat acatgtatag atgtgtgttg gaatatacca atatatttta caacgaaaat 120
 agagaaaccc caagtttgggt gaatacaaaa aagaaataaa aacaggaaac agaaaaagaa 180
 gaaaaacaag gtggaactga caaaagggtcc aaacaataga agtcatcaat ggggaaaatt 240
 gggcaatgta cagggaaatc taacccaata ttgatgagtg tcgtaaaaaa aaatcgaagt 300
 aggaagaagg acataatgga acttatggca caccaggtg ccaacaccac ctgtaaaacg 360
 t 361

<210> 390

<211> 383
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-C1

 <400> 390

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 gtcgtacaca aacaacacaa gcaaacagtt ggaagccgac tgtgaaacca acccacattt 120
 ccagactccc aacagaactg cttctcagtt agttacgcaa tatgcctagt cataaggaac 180
 acaataaagg aattaaaata tcagctgacg gttacgcact aaagttgagc ggtattcggt 240
 tggacgtaga cggcagtttg gtcactatgg tggacgcaga cgacctcaga gccctcatgt 300
 ttaaggaaag cctcaaggaa aagtcaaagc tgcattgaccc aaaatttttc aaaagctatt 360
 atgaggagaa taaggactac ttt 383

<210> 391
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-C10

 <400> 391

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 ttcccgttgg agaagatgca ttcagtttca gtcagacttt tggaaatgct tctgcttcag 120
 gcaacgcctc tgttattcca gctacaacca agatcccca gttagaagta actagtagtg 180
 cctcatcaaa ggacaatgga aaagcagctc aagtagactt tgcagattac tcaaagggat 240
 atccttcgcc tagctatttt tacgctcctt cttacacatc ctatgtggaa tttcctcaat 300
 atccatecta tccatcatgg ccttctttta atgagcagcc tgcctttggg ggcttcgac 360
 ccaatgcaga gtttggagag tctgaaattt tcgtgtgatg gaaacaaa 408

<210> 392
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-C11

<400> 392

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gcaggtgaaa aaagatggca gttattcaaa agactggaaa aagagaatgc tactgcccgc 120

tttttcttac aaaacaaagc tattttttcca ggtgctagag ttttggaact ggcttgtggg 180

tccggagaaa ccactttgca agtagctgcg aaagtaagag gttattctgt accttcagga 240

gagaccacgg gggaagtggg ggataaattg ttggatgtat tacgtccatc ttatcaccag 300

gaagggaaac tggatggtag cagcaatagt ggttcggtag taggtgtaga tatcgccaaa 360

ggaatgctga atgtgttcag aagcatgttg gaaaatactg ttttgaaaga tcacgtgcaa 420

cttgtagaaa gtgacgtgga agcttatgaa atg 453

<210> 393

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C12

<400> 393

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tacagcgcgt tgaaaccctc agaggactca gtgaggcgtg aaagacttaa cctgcaaaca 120

tttttaacca gctgggtttt attgaagaga acaacagagg tctcttgtag ttgaatttgg 180

aaagtgggtgc ttttaactct tcttgtcgcc aaaattttcg aaactattac gagtaacttt 240

aaagttagct ccatagatgt tccaacagcc gcgtcccaca aatatgtatc gttctataag 300

aaacccttag tccgaatgcc tgtaggaggt tgtacttgta caaggagaga aaataagtgc 360

tttttgaatt ctagtcagaa agcaaacac 389

<210> 394

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C2

<400> 394

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aaaatatggtt ggaatttctg aaagatgtat acgacctttt tgggtttaca tttgagttgg 120
 tgctttctac gaaacgtgaa aaatttatcg gtgagattga tttatggaac atagcgggag 180
 aggagttgag aagagcttta caggatttca cgggaaaatc ttgcaatgaa aaatactggt 240
 ggacactgaa tcctgaagac ggtgcttttt acggcccaaa gattgatgtg aaaatccacg 300
 attccttaca gaggaacat cagaacgcaa cgattcagct ggactttcaa cgtcccatte 360
 gctttgattt ggtgtaacac gcacctagtc ct 392

<210> 395
 <211> 367
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-C3

<400> 395
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 gttttatgga ccaggaggcc cttatcatgt atttgctgga aagaatgcta gtcgcggttt 120
 gggaagact tcaacagacc cagatgatgt tgaaggacct ttggatgacc tttctgagag 180
 tcaaaaggat gcactaagcc agtggtatgt gcgctttatg gaaaaatatt agaacatagg 240
 acacttgaaa gtagaagatg tagccaatgt gaaaaagtcc gattagtatg cgtggcaaaa 300
 aaaatttttc ttatttgtgt tgcttttagt gcctcgttga ataataaacc acagaggctg 360
 tcaatgg 367

<210> 396
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-C5

<400> 396
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 ctgttcgcga tatcttttta ttgttaacgt tggaagtaaa tgtacagtca ctagtagaaa 120
 caagtatgta tcgtggaatt cgagaaagga taggacgctt gagcagagac ccttacgacc 180
 tggtaaaaag gggaaacaaa agctgccaat ttatttgctt gctgcccaga actgtaagga 240

tcacttaa at acagtata aaggtaccag ggagaatgga ggcggacaag tgtccaaaaa 300
ctcttgtcga caaattctta cccttgcttc cttttttgca atgtttcttg caaaaccttt 360
caatactggt gctgaaatga atg 383

<210> 397
<211> 364
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C7

<400> 397

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ttcgacctgg tggtttcttt gatagcagct ttggagactt gttttcatgg gcaaccgacc 120
ctttttatcg agatatctgg tctatcacac cacgtagttt tgaagggtcaa acatgggtcg 180
ctaggataga ccttgtagag aaagacgact gtttcttggg gaaagcggaa gtacctggag 240
taccacggga aaagatcaat gtagatttga aaggtgatat tctaacgata actggggaga 300
aggaagacga gaaaaagtcg gatgaagaac gggaaggtac cgtgtatcat agagtggaac 360
gctc 364

<210> 398
<211> 455
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-008-Q1-E1-C9

<400> 398

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tttacgagag aaggaaagtag aaagaagaga gtgtaaggcg gcgtcataat agaaatccga 120
aaggagtaga agaaaagaga gagaagaaag aaaagaagag aaaagccgta ctgaagaccg 180
acacaggtac tcgaggagaa aggagacca aattaagggtg agagaatgga cgataaggaa 240
ctaggcaaaa ggatatggta tctgcggtag aacatatgaa agaagcagca ccgactgttt 300
agcaaaaaca cagcactctg cagaaaagag aaaatgtaaa gtataaagtg tgcggcctgc 360
caaatagtag agaagaaatc gatgaaagtg acagcgagta aaagatgagg tatanagaat 420

ggcggtccta acggttaagga tccaaagga gcgaa 455

<210> 399
 <211> 315
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-D10
 <400> 399

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 tgagcactat ctcggtttct ctcaagaaac ccgatatga ttcctttcta gggtttgttc 120
 ccatacaagg tattggtttg tcaccaagga aactattcaa taagtgttgt gctcgaccga 180
 ggagaacttg gacctctcca accaccataa agtgtatcca agacaacctc catgagtggg 240
 ttcgttgtaa agtatttcgt tgtggagaaa aacatatatt tctaaggcct aacaacaact 300
 taactggggtt ccaag 315

<210> 400
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-008-Q1-E1-D11
 <400> 400

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 atgggcgacg agggcggatg cgcgtaggaa tcaggtcata gatgtgtttc taagggttgt 120
 tcgcagacag tgaattagtt ggtcacaaac gagtcaatac aaaaagtgtt gtgctcaatt 180
 gatgatagct tggacctctg gggagaccat ctggtgtaag taagatcaca gcgatgaatc 240
 ggttccttgt agtttagttc gtggtagaga aaaacattgt cttcgaggga ctatcaccat 300
 cttctgtact tccaagacac tgtctatcga aatagaccgc caactggatg ccgaattgtt 360
 tcgttctgca ctcagatt 378

<210> 401
 <211> 438
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D12

<400> 401

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ctcatactgc tgggttccag tacagaccta tgaaacttat caatgttctc aagagaagaa 120

gaaggagtac agctatcctt gtcaaactta tgagcagggt tcaactactt accagtgtgg 180

tcagtacgag tcccaacaag ttactacca atgccaaaag tataaggagg ttactcagca 240

agaatgccag tacgtccaag agtcgtattg tgtcgagtat gaagaatgtc agcaagttac 300

ccaggaagtt tctccttcag aaattgtcta ctacggtgaa tcttcttcta gcagtagtta 360

ctactactag aacacttgtg aaatgcgcaa agtcgcaaag tagagtgtcc ttttttgaat 420

aaactgttac tttttgtc 438

<210> 402

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D4

<400> 402

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gcggagaaaa tggtatgttg gcaacgaatc gagactcgct gtttgcttgt tcgcaatatg 120

tggtcacctt tgaaagtggg tctgctgctc aaggcttagt cgcgcctgtt attcaatttt 180

tagaaagaat ttagaagaat tgtaaaatga atagttatac ttgagtga ctcttccaac 240

caacaagggt ttcttattgc gctctattgc gcaagtagag aactacgat aacttttatt 300

tatggcaaaa gaagtttcaa cgaccactca agtacatctc tccctttttc gtaactaaaa 360

ctattcttct ttctgttg 379

<210> 403

<211> 363

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D5

<400> 403

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gagaaacact cacacatgta caatccagat gcacacgttt catcatacga attcacatgc 120

gtttgcttgt tcgatagaga tggctatagt aacgagtgat agtgtgactg agagcaacaa 180

cgctttggac gcaactgact ttgacaagta cgtgatgaag acatacaaac gacaaagttt 240

atactttaca catggcagtg gtgcatggct ttgggatcaa gatgggcgca cg ttgttggc 300

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cgt 363

<210> 404

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D6

<400> 404

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ttggcaaaga ctcaagtaca ataggtat tggacctttt ttgtatcata tgttcttatg 120

tgccattgta atcttttaggc gttttgtgag tgttgttgtt ggttttggtta agagaagagg 180

tccaacgcc aactcgtgaa gcgactgcaa tgataaagac aatactttac agcgttaaaa 240

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataaa aaaaaaaaaa aaaaaaaaaa 300

ataaagaaag aaggaaaaca aaaaagggct gtacaacaaa aaggataaaa acatcgaaca 360

ataaaaataa agggggggcc ccccaa 387

<210> 405

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D8

<400> 405

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aaacctgggt ttactcgatc agcattcttc ctatgaaagt acgattgcta cagcttcggg 120

ctataaactt aagatgttgg tgattatctt tgaaatgggt gtagctttcc actccgtaat 180
tattgggtctg aatcttggag taagcacagg atcgacattc cgtacgttgt ttgctgctct 240
cgtatttcat caattctttg aaggatttgc tgtcgggtact actgtttccg aagcccagtt 300
tggcacttgg accactatag taatgggtact ttgctattct ttggaaactc caatcggtat 360
atctattggg attgggtattg cacacactta tcaggaaaac tcct 404

<210> 406
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D9

<400> 406

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atggaatgag agtatttttg aggaagaaga acgaaatgaa atgtctgcag tttatcatcg 180
tgccatacag gaagaagaag aagaagaaga gagacgaggg ttgccatccg ataacaacca 240
catctcttcc tttcctgaaa cctcgcagga aaaaactgga caaaaggtat cttccaagtc 300
ccgtgtacat gctaaagacg atccatttta cattacaacg actaagaaga cacaatcgag 360
atcgcgtaga gaaaagtcta aagtagaagc agacgacgat tcattcgaag actcgttggt 420
ttttgcgtcg caatccaacg at 442

<210> 407
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E10

<400> 407

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tacactatct tcgagaggtg ttcagattta caaaggctcg ggtaaagatt ggctcccgac 180
cttacacgtt gcagttacag gtgctgcagg acaaatagct tactcggtat tgccaagaat 240

tgccaatgga gaaatgttgg gagaagatca acctatcgtc cttcatttat tggaagttcc 300
 tcaggcacta agtaaaactac aagggtgtagt tatggagttg gaagattgtg cttttcctct 360
 tgttcaggga atcgttgccca cagatgactt gcgcaaaggg tttgctgat 409

<210> 408
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-E11
 <400> 408

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 gtacattcaa catcatcaaa tgccaaaggg aggaaagaaa gattcttcaa agaaagaagc 180
 cacaagtaaa cctgcagcag cagatgctac aaagacgaca gaaaagtctg gtccggaagc 240
 caagttgaag ggaactggtg caaagaaaca ataaaaagtt gactatgcat gtgtaagtat 300
 ttgtggattt tccagtagaa caagctaaag ttgtttctga aggcagtcct gttatgtctt 360
 gtgagttctg tttgatagtt tccagctatt cttttggtag tgaataaaga gaaaattt 418

<210> 409
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-E12
 <400> 409

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 cgtctactat ttgaagacaa tggcatcaaa tactcggaag agagggtaga agctggcgag 120
 cagtggcaaa aactcaagca agaaggtgtg tcttctggca agatcccctt tggtcagatg 180
 cctgtattgc gcgatgggag catgtattta gcgcagagtg gtgcaatact tcgtcattta 240
 gcgagaaaac ataacctcta tggagacacg gaagaagaga aagcgttggc ggatatgatc 300
 aacgactttg ccaacgatct tcgaactccg tatgtgcgca tgatttacag tgatacgtgg 360
 aaggagatgt tacccgagta tt 382

<210> 410
 <211> 186
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-E4

 <400> 410

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 ccagtccggt gtttgccgcg ctggtatctc aacatgtcgt tgaaggattt gctgtcggta 120
 tgactgtctc tgaagctcat ttgggatct ggactaatat actaatggta ctttgcgagt 180
 cgttgg 186

<210> 411
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-E6

 <400> 411

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 gaaaaagaaa aactccatac tccgaaccgt ttcgaagaaa ccaagtccaa agtagaaaac 120
 tttttatcca aattaaaaca agaaaacgaa aagctatttc agaatgttgc tcagcacaac 180
 gtagaggtag aacctcgtga agaaagtttt atagaaatga atatttttat agacaattct 240
 ttgggacaac ttgtaaaaaa cgaacaagag ttgtcgtcaa gtcaagacaa gccttggata 300
 gaagaactgt agtcgtcgac aaagtagccc gaaattcttt tcttttcctc tgtccattgg 360
 aaggcgctgt ttggttgctt ggcgcatata ttcaaaactt aaggtggaat ggggttg 417

<210> 412
 <211> 391
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-E7

 <400> 412

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 cgactttttc tcaggaaatc ttacgagata tgcattctgt taccattcga tgcattcatcg 240
 tcgtttctagt tgcagttatg gagatgggtg tggctcttta gcgttgatcg acaatgttgt 300
 ttgaaccag tcattatcat tatggatata attcttttcc taactgata catctttag 360
 atgaaaagtc atcttgattg tcatagatgt g 391

<210> 413
 <211> 310
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E8

<400> 413
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 tgactacgct tacgccttct tatcatgctg agaattattc tctgaagat aaccgttatg 120
 atcttcgtcc ttttctgtat aatagtcgat ggcagtgga attttctaag atcgatcgac 180
 ttgttgatga gaaggaagaa acaactaacg atattgctca ttaaataaat gatatgtttt 240
 tgtggtgaaa aaaaaaaaaa aaaaagaaat gacgtaaaat caaaataaaa attggtataa 300
 ataaaatgta 310

<210> 414
 <211> 82
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-E9

<400> 414
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 aataaaacga aaacactttt cg 82

<210> 415
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F10

<400> 415

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gtcctgttgt ggacgtggaa aagttgaaag cttgtcgtag tgcagatgag gctttgaatt 120
ttttttctta gagaataatc gaggccttttg gtcttttatg taaaggagga aattttgggtt 180
tcgacaactg cctcgtttat tctgtgtgtt ttgtttgtgt gttttgggtgt gtttgataaa 240
tatcatctat tctctggtgg caaaaagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
taaaaaaaaa aaaaaaaaaa aaaaaataaa aaagacaaaa aaaaataaaa aatgaaaaaa 360
gtaaaaacaa aaaaaagcaa gcattaatac aaaaaaaggg ggggccccca aaagggttca 420
aggttaactt a 431

<210> 416

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F11

<400> 416

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ggctagttct tagagctgct ttggagaaac agtctgtaga tgtggtagct atcaacgac 180
cctttattga tttggactat atggtctaca tgttcaaata tgactctgtg cacggcgctt 240
atccaggtac agtggttagca aagaatggaa aacttgctgt ggatggacac gaaatggcag 300
tgtttgccct ccgtgaccct agtgagatcc cttggtcctc tactggagca gaatatattg 360
tggaatcaac aggagtattt actgctgcag ataaagctcg agcacatatg aagggaagtg 420
ct 422

<210> 417

<211> 361

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F3

<400> 417

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accgctgggg ccttgattga aggtggtcgc actggctcttg ttgcaacggt acgtcactta 120
acaaaacctc ccgaccaatg ggaaattgga ggttaccctt tgaccgtcat gatggacatc 180
gaaaggagaa cgggaaagaa cgttcccgtc atcaaaaaag cgttgggtgga tttgaaaggc 240
gaggcatttc gcatattttc tgagcagcag gactcgtggc gtttgacaga agattatcgt 300
tgtcctgggc ctattcagca tttcgggtccg atggcacatt cgatgaactt cactttgatg 360
t 361
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<210> 418

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F4

<400> 418

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gcatgggtcta ctgactactc caggttatca gttaggacca gacaaacctg ttgcttatgc 120
actggaaggt tccatcccta ttgctgggtgc agcagtacag tggcttcgtg ataacttgca 180
aatcatcaag accgctccag aaattgagga gttggccaat tcggtgaagg ataatggtga 240
tgttttcttt gtaccggcat tttctggttt atttgcaccg cactggcgtg aagatgccag 300
aggtgttatt gtgggtctca cgcagtacac taccaaagca catattgcga gagctgtgct 360
ggaagctgta tcgtttcaag tatg 384
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<210> 419

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F5

<400> 419

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ttccgcacga gatgttcatt ttacatgcga tgtttattag gaactcgtgc gttcttgggg 120
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tactatcgac gtttctgaac gaaagtattc catcgatgaa gtggtacaga gaatatctca 180
aggagaagtc attgaagcgt ttgggtcagg tacagcttcc atcatcacac ccgttactgg 240
aattcattat caagacaaaa tgtattccat tgtctcagat acagaagaga aaatatctcc 300
aaagttattg aaaagcatgc aagacatatt ttatggtgaa gttgaggaca cattttcatg 360
gaatgtggaa gtggatactg aataaataaa 390

<210> 420
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F6

<400> 420

ggagagccga ataccagcac cgctattaca cctggagaag gaaaggatgt ttctttgtct 60
tccccaagaa gcagcaatcc tgaacaatg aatgcaaata gttgtcatgt agaaacaaca 120
acaaaggatg agagtagcca tgttgttcaa gaagaatcca ccgagacaaa gtcccatcga 180
gaacaaatat tagaggaaga aatagaacgt ctcaagagca aagttgccag tttagaaacg 240
gaagttagcg atttcagca agacgcagaa aatgaacgtc gaaagaatca tcacttgatg 300
gaggcgaaaa agtatttgga aatcagtttg aatgaagttt tacacgcctc caaaagcaca 360
tctgctgagg agatggag 378

<210> 421
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F7

<400> 421

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aatatgggtt tatatggaga gagagttgga gcactttctt ttatttgcaa ggatacttgt 120
ccagttgacg ctgttcaaag tcaattagaa actattattc gctccatgta ttcgagtcct 180
ccagccaacg gtgcgagaat agcttgtaga attctaaatg atcctcaact atttcaagag 240
tggaacagg aactcgtaga aatgtcagca cgtatccaaa atatgagaaa gttgttatat 300

gaagcttttag tttccagaaa gactcctggt gattgggtcgc atattacgaa gcagattgga 360
atgttttctt ttactggact gaatgcaaaa c 391

<210> 422
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F8

<400> 422

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gccatggata tggtagaaac ggttcttccg agagccacca aagttcgtat tgcggggaat 120
aaccgtacaa gaccgagtct tgttggtcag ttgggggtata tcaagtcggg acaaagtctt 180
ggtggttggc atgaagtagt gttagaagta agtgattttg gaataaaaaa gatagagtct 240
attcaatata tgcttttgtg aaaggatgga gaagaactga gagtacagcg gaatgcactg 300
gaagttgtat atgacgatca tgggtgtcct attacagtgg atatccctcc tgagccaaaa 360
tactcgcaac caactgcca caa 383

<210> 423
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F9

<400> 423

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aagatggtgg agttccctct gtggaaatta tacagaagtg gctttctctg ttgagttgtg 120
ttacggataa ggaagcatcg gcgaagacta tggagaaatc aggactgcac gctaccaata 180
agttctcttc ttcaatttgt ggagatagtg caagtgcgaa tgatacctcc aaaataagta 240
tcgcagttca ttgcaaaaca ggtttaggac gagccccagt tatggttgcc atagcgttga 300
tcgagatggg tatggatgca cttgatgcta atggctatat tcgtgctcgt cgccgaggtg 360
caatcaacag ccgccagctt ttattcttgg aacagtacag accg 404

<210> 424

<211> 417
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-G10

 <400> 424

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 gtcgaacact gcttttggtg aagtgttctt cgtttcttgt gaaacttttt gttagcaaat 120
 tcaaataatc acctcttttg tttgcaagtg gttgtgttag cggtagttgt ttgtttgaaa 180
 agaacaactg ctttgtttct tcttgaaaca agtttcttgt gaaaaaaga aaaaaaaaaa 240
 aaaaaaaaaa aaaaataaaa taaaaaggaa aatcaaaaaa aagtgaaaaa aaataaaaga 300
 aaaatcgaaa caagcgctc atctgccggt ggaagaactt tatcggtgac attcatgtgg 360
 aagagaattg aacatgttcg tggtagtttc gtgaacaatg cccttggtaa ttacttg 417

<210> 425
 <211> 328
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-G11

 <400> 425

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 cgagaccatc ccagtttttag tagactatat ctcggtactca aagccattgt gttgtccatg 120
 tatggaacat ggatagtacc ccattgggag ttaactttgt ccaatgcctt cgtgggaaca 180
 ttatttatcg cacttccctc tagcttccaa ctgtaaccag attagcaaat aatatgatct 240
 tgtttgaacg caattggttc tggggaccca gaccttcagt ttcaggagtt ctaaagtgtt 300
 aagtcaaaat ctctcggttc ttctggcc 328

<210> 426
 <211> 346
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-G12

 <400> 426

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ggttttgttc actacaggtt tactatcgaa aaccaagaaa atgttcttta tatttatgag 120
ttgcatattg tcgatggata tcaaggactt ggtattggaa agaaattggt tcaagtcttg 180
gaaactattg ggggttcgaac aaaaatgaaa aagatcatgt tgactgtatt taaaagaaat 240
gtggatgcag ttcgatttta caaagaaaaa cttggggttt ctttggtatgc atcgtctcca 300
gagggtttttg gagacttgga atgcaaatat gaaattcttt caaaac 346

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<210>      427
<211>      383
<212>      DNA
<213>      Cyanidium caldarium

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<223>      Clone ID: LIB190-008-Q1-E1-G3

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<400>      427

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ccaacttgat gttgcaataa cagctccaat attttgcaat tgtgctagtc gggttgttga 120
ttcaagtagc aagaattccg tggagttgag acgagatccc aacgaaatcc aactttcaga 180
ggatgatgca ttttagaact tgatgctgat tgttattatt ttgtgttgta tgcttttggc 240
gtgatatata gatgagtttc taaaatatag gtttactgg gataatattt actttgccct 300
agaaatatcc acatatatcg agaccacacc ttattccaac acacaagttt agtgagttgg 360
agcactttca cggtggttcc caa 383

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<210>      428
<211>      366
<212>      DNA
<213>      Cyanidium caldarium

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<223>      Clone ID: LIB190-008-Q1-E1-G5

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<400>      428

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aagactttta tggaaaagga acaaataaaa tataatgata cgacaacagt gaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggatqaaaaa 180
aaaaaaaaaa gggcgacccc acaaaggtt ccaaccttac ttacccttac agttcaagtc 240

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catagctctt caatcatgtc acttaatttc actacatcgg ccttcttata aaactttcgt 300
aactggaaaa aactgcctt tacccaattt aacctccttg caccaaagcc ccttttaate 360
agccgg 366

<210> 429
<211> 343
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-008-Q1-E1-G6
<400> 429

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aatttgagta tataaaactg ggatgagaac acagaaacaa catattatga gcgtttgtag 120
gtaccagaga gaaaagggtg ttttcaactg tttattttcg atgaccacgc tgcaaccgta 180
agtatgtagt gtaaacgcgg tagttttgta gttttttgtg ttctgtgaag cctgtcgcac 240
tacagaaagt gacgagatac gtggatttgt aatcatattt gcattgttca aggaaacttc 300
actgttactc tgaacaagtg gttatagttt tcgacttgcc agg 343

<210> 430
<211> 372
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-008-Q1-E1-G7
<400> 430

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agagagatat atcatacaaa aagttttatc acccaactcc ttcttcatta cttgataata 120
gcttgtgtga acgaaaactg aaaacctggt ccaacattct ctatcggata cgagcccaac 180
aacagacaga agggaaaaaa gaagaagaaa gaaaccaaca actcagtgat tacgagtttg 240
cagaacgttg tatggatggg gggttgccctg tggaggatgt tcaagaactc ttggttcggt 300
tagaggtaag aacgagtcaa ttacccttt agggaatact tgagcaatgc gaggaataac 360
atggaataat at 372

<210> 431

<211> 334
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-G8

 <400> 431

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 gtagttatat tcattcttgt agttgttgct atccatgcag caaccatcca atgaacgatt 120
 cattttcagt atcaatagta gtaatatggt ccaagtgggt ggagtgggtt cttggatact 180
 ttcatagcta tgttgacata gtggaagaga taatccaaga tatatttcca agtaaatttc 240
 gcggacatga acgcattcat tgtgctattc aatgtgcaat ttgtaagcca gatggtcacg 300
 tcttgtgaca tgcaatgtaa tattccaatg ggaa 334

<210> 432
 <211> 394
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-G9

 <400> 432

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 cccacgcgtc cgggaaaggg accttttgta gtggaaagtg ttacttatcg ctatcatggc 120
 cattctatgt cggatcctgg gttgtcatat cgttcgagag aagagattac ggaaatgaga 180
 aaacgtgcag atcctatcga gttggtaaaa tccagaatat tggaacaagg ttgggctaca 240
 gaaaaggagt tgaagtcgat tgaaaaggaa attcgacaac aagtggatga aatgacggaa 300
 aaagcgaaac aagcgctct tccgccggtg gaagaacttt atcgtgacat ttatgtggaa 360
 ggaattgaac atgttcgtgg tactttggtg aaca 394

<210> 433
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-H1

 <400> 433

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 ctctagtctc ctttctatta tttggagttg tcatatatgc agttgcagga cctctcaaag 120
 actctcatat agcttccaag gttagaggat acagcagtca atatactcca acctacacta 180
 gcgagtatac tccaagctat agtagtgaat acactcctag ctatagcagc tcctatagtc 240
 cagtttattc ttctccttat caatcctcat acagtccctac ctataaaact tatccatgga 300
 ttcaaccttg tgc tcaagct tgtgcgggat gtctttactg ctatcaacaa tacaatttct 360
 attatccct 369

<210> 434
 <211> 363
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H10
 <400> 434

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 aagactcttt gacaaagtat tacgagcttg cagtcgttt ggttacacaa aaggaacgtg 180
 agcgggcatt ggtagttttg aaagtgaac atgcgttaca aaagagtatc gaacaagctc 240
 aaaatatgcy tttcaacctg gagcaagttt tgagtgaat agaattgaag caactggaag 300
 ccgactatgt acagaaactg aaaacgggaa caaagttatt acgagacatt cagaaaacct 360
 tgt 363

<210> 435
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H11
 <400> 435

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 aaagcacctg tgtggacctt acgggttttg ttccaggaat gatagccgaa ctgatcggga 120
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gttatgcaga tatgcaaata gtacacagcg agtatatcaa gtcattgacg catgaagtgg 240
 ataagaaaca gctttatgac gggcttcaca agctctttcg tggtagggaa actccggcaa 300
 ttacattatt tgatggtgcc tatcgagatc gaggtctctt gatagcaatg aatgatggat 360
 ccttacaatt ttacaacagc ataacatgt 389

<210> 436
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H3
 <400> 436

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 tgggataggt gctagaaaaa cttccacctc tgaagtttgg ttgaaagctg gcacaggaaa 120
 ttattttcta aatggaaagc caatgattag acactttcga gaaattagac tgattgaaga 180
 agcactggaa ccactattac actttaatat tgctcaccaa ttcgatgcgg attgctttgt 240
 agttggtgga ggtgaatcag gacaagcagg tgcgctgaaa cacgggattg cacatgcatt 300
 gaaacttttt gaccccgctt actatccaga actgtataaa ctcggttact tgctacgtga 360

<210> 437
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H4
 <400> 437

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 ttggagtgtt gtaaaatgtc aagttttcta actcgagcag ccttgtcatt gcgtggtgta 120
 atgcaaacag tcataaactt tcggaccgca aggggagtag caacgagact ttatcacgaa 180
 aaagtagtcg accattatga aaaccaagg aatgtaggtt ctctagataa aaacgacaaa 240
 tatgtgggaa caggtctagt gggtgccct gcctgtggag atgtcatgaa gttgcaaata 300
 cgagtagatg agacagggaa aatagtagaa agtaggttca agacatttgg ttgtggttca 360
 gcaaacactt caacttctta tgcaaactag tcattcaaaa caattggttt caaaaaggca 420

attaaaatta ggaccaagga aattgcag 448

<210> 438
 <211> 367
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H6
 <400> 438

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 aaggcggaag gctactttac atacaacgcc gggaagtacg accgatacat caacacacct 180
 atttacctgt ttgtgtcctt caccggctctt tatgccttta ttgacggttg tctttgggcg 240
 gcaggaaaga aggaaagtca atcgtgaata gcgttttttg tccttgtgga cagtcttatg 300
 aactagtgat tcgtttgttc tgccagtttt agtttcttgt aatgaaagt tctttttttt 360
 tccttgc 367

<210> 439
 <211> 379
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-H7
 <400> 439

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 ttcttgctt ccaatattca caccaaggaa ggtatctata tttggggcgt tgcatctat 180
 tatcttttct ggggttctgc tctaggtcca actccttggg tggttgcttc agaaatttat 240
 ccaacctatt tacgtagtca cggaatgttg ctatctgatg ttacaaactt tacaggcaac 300
 tttattacta catacgcatt caaacatatg accaatgcaa tgacgaatac aggtaccttt 360
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<210> 440
 <211> 380
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-H8

<400> 440

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tatgtcgggc cctgaagagt atgttcagca acagcaatgt gtaaagtatg tagcccaaca 120
agttaacgca accaaacaat gtgtcaagta ccataacgag caaaagattc aaaaaagta 180
ttgggtccgc tatgttaact gagaaaaagt acaaagcaag cagtgcacatc agtatgtatc 240
ccttcagaaa gatcaagtac gagtcatgct ctgtctcaata tgaagttcaa aagatcaagc 300
agcaacaatg tactatgaca gtctctgaac aatacatata gcccgatact tgctacaagt 360
atgtccctga acaacaattg 380

<210> 441

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-H9

<400> 441

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tgtaggtgga attccctaca tcgcaacgca cgatggtcgc accattcgtt atcccgaccc 120
cttgatcaaaa caaatgata cgggtgattgt ggatttggaa acgggaaaag tgaccgattt 180
tctcaagttt gaagttggca atttgtgtat gattaccggt ggacacaaca ttggaagagt 240
tggtgtgatc cagcatagag agaaacaccc tgggtcgacg gaaattatcc actttcgaaa 300
tgcgagaggt caagagtttg cgaccaagtt ggcaaagtgt tttgtgattg gcaaaggtaa 360
atagccgttt gtttcgttgc cgaaaggtaa atgcattcga ttgtctattt tagaagaaca 420
cgaaaagatg atg 433

<210> 442

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A10

<400> 442

accacgcgtc cgcccacgcg tccgcgatga gcaatcctct gcacgcgcag ggtttcgctc 60
ggacgtactt gttcgtttcc caacaaccaa ctatgtttat cagttggctc tccgtctctg 120
ttgctgctgg cagtagaaca cgtttgcac ggtcaacgct tgataggaag gtttgccgat 180
gtttttgtcg aaaccggtgg aaacataata ttcaagtatg aacgcatatt tagtcttttt 240
cgctaaccta agtccgcctc gagagttgca attgcgaagc cgcgacgggg aagaccggaa 300
aaggatctaa agacggagca ggtgcaaccc acggcggaac gagtcgaaaa ttggaagcct 360
aaccctttgc ttctagccgc tgggtacaatt gctttagcgt ctgctggagg atac 414

<210> 443

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A11

<400> 443

acgcgtccga ggacgcattg gcggacgcgt ggggtgaaaa cgagttgatt ctgaaaacaa 60
tatttttatc tgtgaaacca aaatgctatg gttgggatac tgctccatga tattattcag 120
gttgaatcca actagcgaga gcgaactatt ccaagcttgt tggattgat tgaaaggctt 180
gatgactttg caacagtaac cgggtgggac gaaattcaag aggaattttg gaaagtttga 240
tacctactcg tgaacacaaa tactgaagaa tcatgtaaca atgcagtgtg tgtttattac 300
tttcatagct aatttagagg aaagtgtaac agttgaattt gaccagtcct gtcgtttttt 360
attcttttat agataaactt ccttaagatt ttgatcttcc t 401

<210> 444

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A5

<400> 444

cccacgcgtc gcgcggacgcg tgggcttatt gtccggattg gtggcgattg ggaacgagaa 60
aggcgtcgac gacgaaagaa gatcgctgta ggaacaacga cataaaatgt ctgttttatt 120

acaaagttcg gatttccaac acattcttcg tattctgaat accaacattg atggcaagag 180
gaaagttatg tatgcgtaa cgcataaa ggggtgtgggt agacgtttct ccaatttagt 240
cttaaaaaag gcgaggttg acctgagtaa gcgtgctgga gatttgacgt cggaagagat 300
tgaccgcata gtcaccatca tgcagaaccc cgcacagttt aaaataccag attggttcct 360
caacagacaa aaggatttga gagacgggaa ata 393

<210> 445
<211> 357
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A6

<400> 445

cagctcaatg gcgagaaaag gactgggttg tgtgataggt gcaacgggtc cgcttgga 60
agaatgcgtt ctggcactgg aaagtgaagg atatcgtgtc cgtgcagcaa gcagaagggt 120
tgaaacggct cgtgagatgc tactccacaa ggtaaagaac ccttcgagag tggactttgt 180
ccatgtcgat gttatggaaa aatctgtact ttctagcgta ttaaaggatg ctgaagtgg 240
tttcttctgt gcttcagctt ctgcaggggtg gagagtcctt ggtacttcta agaacacccc 300
gaaacagggtg gactacttgg gcgccattca tgtcgcacaa gcggcagccc aagctaa 357

<210> 446
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A8

<400> 446

acaaccgtca agtggagcaa cgactgggtg gttgttggtg aaggagcaca agtggtgcat 60
tggtgttcaa tactgtttgt aatagtagca gtgagagtat catgacgagt agtaacagt 120
gtagtgtca tcaacaagcc aaggattggg tggagtccat tagcaaaaat gagtggacaa 180
agcctgcagc tgctgtggca ggaactttgg cctccttggg actgataaga atgtattcta 240
atggacctgt atataaaaat tccgtcaact tgaagggcaa agtagttgta gtgacagggt 300
ccaatacagg cattggaaag gaaacttgta ttcagttggc aaaaatgggc gccactattg 360

tgatggcttg tcgtgaccca tcgagagctc

390

<210> 447
<211> 328
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-A9

<400> 447

actggaaaag gctttcttaa tcatcaacag aaacaaaagg ctatgcgttt ggcacgtaaa 60
gcaattcgtg gaataagtaa aaaggataga cgcaaaggag aatctgaccg aacaatttat 120
aatgaaaacc ctaaacatctt acttgctgga aaacgcaaat tgggaaaaac ccaacgaaga 180
taaatacataa atgttctagg cagcaagtgg cttggcaggt aatatttttc cttggcattg 240
tccaaatcca atacgaatat ttctacaatg attttgaca acaaaactca gcattagaac 300
agtagaaaat aaaatagcgt gcgcaact 328

<210> 448
<211> 393
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B1

<400> 448

agttttaatg gtgttgcaaa ccacatcatg tcacaacaac cgtcttctgc acttcgagtc 60
gttgatttca gtaccaaaga ctatgatcaa agtggattga cagaagcact tgaacgtggt 120
cctaagtctg ctctataaaa gtttcggttc ttatcgcca ggttgctctgc aaatacagct 180
gagcttgcca aagatgcaga cgctgtttgt gttttgtca atgatactgt gaacaaggaa 240
gtattgaaga tacttcacga cagaggagtt ggtttgatag ctttgcgttg tgcaggcttc 300
aataatgtcg atttaaaggc agcttccgag ttgaaaattc ctgtggttcg agtacctgcc 360
tattctccta atgcagttgg agagtttggt gct 393

<210> 449
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B5

<400> 449

agtgtgtggt actttggatt ggggacaact gagtttttat tatgggtatc gatctcgaaa 60
aaggagggtcg tattaagaag cgtaatagaa ctgcgcccaa gtcagaaaac cttacctgc 120
ttttattggt caagctctac aggttccttg cggaagaac caactccagt tttacaaaa 180
ctgtattgaa gcgactttat atgtcacgta acaatcagcc acctcttggt ttaggaaggt 240
tggtgaagct gtctcgcaaa aatgccgaca agatcatcgt cgtcgtgggt aaagtcttga 300
atgatgagag actttatcac gttcccaaga ttactgtctg ttgtttgaag atttctgata 360
gtgcaagagc gcgtattcaa aaggctggag gagaagtttt aacct 405

<210> 450

<211> 443

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B6

<400> 450

acgacgttca agcgtgag tttgtggcaa cgtacacagc tcgatagaaa ctgcaaaagt 60
tatctaagaa acttgtcaac agcacttgca tatcgctttg ttcatatgag cagtccacaa 120
gactcagcta gtatgaataa cttcaatatt gctctttgtc aaatcctatc cacggataat 180
aaggaggcaa atatagcaaa agccgtggag gctatagaga aagctgctag aaatggagcg 240
aaacttggtg ttctccctga gtgtttcaac tctccttacg acaatgctgc atttctgtt 300
tatgctgaag aaattcctga acccgagag cacgtatctg aaaaattcaa aacttgtttt 360
gcactgtcag aagcagctaa gaaatatcaa gtccaactat attggggggc tcattacctg 420
aaagggatgg ttcaaagttg tac 443

<210> 451

<211> 241

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B8

<400> 451

acccacgcgt ccgcccacgc gtccgcggac gcgtgggcgg acgcgtgggt cctgttccag 60
 ccttggttcc ggcactttct tagtatgaca gttttcgcca agaaatactt tcaagtagtc 120
 aactaatata agctcaacgt gactatTTTT gagcgcatac ctataaaaaga ctggataaag 180
 aaggggtatt tcatagcaag tggttgtgag gtaccgctct tctttatTTT tactcaacaa 240
 a 241

<210> 452
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-C1
 <400> 452

caacaaattt aaaggttccc ccgggaaaat aattccaatt ggcggttaacc ccaatggtgt 60
 caaaaaacat tgactttaac atacaaaacc aataatattg gcaacattaa cactggaaaa 120
 accttggaag aggaattcaa tacccttTgt cccaggtgg aaaaacctgg cattgcacca 180
 tttgatatga acctaaaggtc caagttgttg cctgtgaagg aagaactgca cttcattgca 240
 gcgaacaagg agtttacggt aaaaatgttt cacaagaagg aagaaaacaa agttacatat 300
 gttgttcgtg ctggagaacg tgtacagggc ccgccagggt atgtccacgg aggtgctatt 360
 gcgacactat tggacgattg tcttggcaat gctgtTTTT tgaaccgggc cct 413

<210> 453
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-C5
 <400> 453

acccacgcgt ccgaagagaa gagagaatgc tgggtggagt agcgaaacaa gagaaggga 60
 gtaaaaggta agaaagagga aaggtttacg agagaaggaa gtagaaagaa gagagtgtaa 120
 ggcggcgtca taatagaaat ccaaaaggag aagaagagag ggtaggctta gaagcagcaa 180
 accagagagg aaagcgttaa agcatgaaag aaaagaaatc cgaaaaagaa gagaaaaagg 240
 taagaaagag gaccgaatca gggttaagagg tagaggagca agaagtatga cccagtaatg 300

aggagtggag taaacagaaa aggaagtaaa aggagggaaat gaagggaagt tatggcaaaa 360
acacgtgccca gcagcagcgg taaaa 385

<210> 454
<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C7

<400> 454

accacgcgt ccgcatgaac gcttgccagg tattacagaa acagccaaaa tatttgctgg 60
tgtggatggt acgaaagaac ctattcctgt tcttcctaca gtacattata atatgggagg 120
tataccaacc aactggaaag gacaagttgt gacgttaaaa gatggaaatc caaatagtgt 180
tggtcccggg ttatatgccg ctggagaagc tgcttgtgct tcggttcacg gtgcaaatag 240
attaggagct aattctttgc tggatattgt tgtctttgga agagcctgtg ctcgaacagt 300
tgcagaatta tataaacctg aacaaaaaca acctccttta ccggcagatg ctggagaaga 360
atctatagct agattggaca aatatcgaca tgcaaa 396

<210> 455
<211> 387
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D3

<400> 455

accacgcgt ccgcggacgc gtgggggaggt ttttaagagg catcgacaat cctatcggca 60
tcaagtgtgg accatctttg gcagtcgatg atttacttcg tttggttgat attttagatc 120
ctgataatga gcctggacgt attacactga ttgttcgtgt tggagcaggt cgagttgccg 180
aacatcttcc aaggtttgta gaagcagtg gcaaggaaaa tagacaagtg gtgtggagtt 240
gtgatcccat gcatggcaat atggaaacat ccaaactctgg ttacaagacc agaagatttg 300
agaatattct gtcagaggtc aaagaatttt atgaaattca ccgtcaactc cattcctatc 360
cgggtggaat tcatttgga atgactg 387

<210> 456

<211> 407
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-D5

 <400> 456

 aatttgactg gggtttatag aatatgacct ttcgatattt tctccatgca tgtacaacat 60
 gtgtacataa atataccaac tttgtttgaa aacatcttta tggaccagta actgttggaa 120
 tgcctctccc atcaaaagac taggacttgg tccaagcaat gattgtggga gaaatattgt 180
 ttccattagt tgcttgggct tcagtatagt tgggtggaggt atcatgtctt tttgtgtaca 240
 agtgcaaact ttccacctac cttaccttga aagggaacaa caatagggtt tctttttgta 300
 caagactcga acaagttgga aatgtacgag catcgttatg gaatagttgg tagcacaagg 360
 ccaaattgga ctagtttgta agcttgacta ggaaggggttc ttttgga 407

<210> 457
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-D6

 <400> 457

 acccacgcgt ccgattcgga gggaaatgag aaagttttgg gcatctttgc aggtgttttag 60
 cttacttttt atagtcttgt tgtttggata caaaaatttg tatacaagtc ccagtccgaa 120
 gaagagaaaa gcaagcaaca tagattactt tatagaagct gctaataccga ggatttgtca 180
 tataacacct ttattcacc agtgtttttt taacgacaac ctgtcaaagc ccccttctgt 240
 atattcagtc agtaaatctt cgtttaactag gcataatccc aactttttgt atcacttatg 300
 gacggagtca gaggcagaag aacttatcaa caggttttat cccggtcttc aacaagtatg 360
 gaggaaattc aacgagtcgt ttgttt 386

<210> 458
 <211> 381
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-D7

<400> 458

aatcgattgt tgaagaagag aggacgagag agtgccctcta ccgctaagaa tatctcgtca 60

tggttgagg tttagagagt aaaagaacaa agcgcaagag agaagataaa actttacagg 120

aaaaccttcc caaggactgg ttttgggtat ggtggccaga ctcggttg tggaagtgc 180

gtataacaga ggtagaagaa gaagagtgg attggccagg gacacaagag cctttggata 240

ccccgatttt gcctctaact atttcttacg acagccataa aactgggaat acttgtttca 300

ttgaacaagt attgtggcat gatggagtgc tttatgacca agaaggggaa gaaaagataa 360

gttattgctt ggtccgcca c 381

<210> 459

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E11

<400> 459

acgcgtccgc attgtagaat ttttctgttt cgtttacttg tctttttgtt gagttatcat 60

ggcacgaaca aaacaaacag cacgcaagtc taccggtggg aaggcacctc gaaagcagtt 120

ggcaaccaag gcagcaagaa aatccgcacc cgtaactgga ggagtgaaga agccccatcg 180

ttaccgtccc ggtactgtcg ccctgagaga aattcgcaag taccagaaga gcaactgaact 240

tcttatccga aagttgcctt tccaaagggt ggttcgtgaa attgctcaag actttaagac 300

ggacctacgt ttccaaactt cggcgggtgac tgcccttcaa gaagcctcgg aagcatactt 360

ggtcggtttg tttgaagata ccaatctttg cgcaattcat gccaaagcgtg taactatcat 420

gcctaaggat attc 434

<210> 460

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-E12

<400> 460

ggtccacgac gcgtccgaag aaaacttgta ttgtggaaaa ccaattgagg ggtggaaaa 60

agaaactcga tagtctagca gacaattatt cggtgggtac gagagcctat gatgcgagaa 120
 tgtgggtcatt ggacctcatc gcaactatta tgagtgtctg ttttgcagtt tttggaatgt 180
 tttcacaatt ctttggttat tatgtccaat tgcccattta caatatggga aatgcgagtc 240
 aatattactt ttatggcgtg atgggaggta tttccgtcgg cctgtcgatc agcgtctatt 300
 tctctacgcg atggtttctt cgtcactttt ctcagggtatt ttgttatgac ggtacaggac 360
 aatagtggtc ataaaaattc ccttggtttt ttgttaaaaa aaaaatactc aatatacccc 420
 gtttag 425

<210> 461
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-E5
 <400> 461

acccacgct cccggacaat ggaaagtaac ggtgggtggtg gtgggtactac gcgtctttct 60
 tcttcttctt atggttggga agcactcggc aaagaagcca gacgcctaga aagtgaata 120
 gactccaaat tggtaacctg tgcaagtttc acgagagcag aatcgagaaa tagttttgct 180
 ggaaacaaga atgtgggtggc agacgaacaa aaactatccg ccgatttggga acaattgttg 240
 aaaagactag gacaagtga tgaatcgatg ggtcgggttc tcgcttcgtc caacaatatt 300
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 gaatttcgaa aaagcaaggc tgcttttcga agttgggttg gaa 403

<210> 462
 <211> 381
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-E6
 <400> 462

acacacgcaa ttgttgaatg ccggtcaagt tttgtaaaga atgcaacaat atgttatatc 60
 ctatggaaga cagaacttat cttcatgaaa ctggagaaag aagaatgtta tacgcttgtc 120
 gtaattgttc tcacagagaa gttgcagaag acttgggagt tccagtttac cgtaatgtgg 180

taacttcgaa caacagagga aagttttttac aaatgtacga tgtgtggctt gaccctactc 240
 tacgaagaac acgaagtact cagtgtctctc aatgtggaaa ccgatgaagca gtttattttta 300
 tgggacctgt tggacgtaac gatacagcaa ttgttttata ctttgtgtgt actaattgta 360
 agcatcaatg gtcaactgca g 381

<210> 463
 <211> 324
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-E8
 <400> 463

acgagaacga atatctatatt tttacgtgac tttattgacg aaaagaaatg tgaaagcagg 60
 tagcgcttcg aagttttag aatttcttac ttttgacaac tttcctgata agatgaagcc 120
 atttatagat gttgggcaga aagtacgaag gaggcacaag tcacaaagtc gacgtccggt 180
 caaacgtaca gcatctgaag aaacttcaga gttgaatgtc gatgtataga cagccgctag 240
 ctgtcttaac ggtccttatt cctgtaatgg aataacacac ctgtcattta cactggaata 300
 aacagtcttc tagttgtttc ctgc 324

<210> 464
 <211> 185
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-F10
 <400> 464

gtccaccgac ccgatccgaat gaaaagcaga gatctctaaa gaaaggcang aaagaaaaga 60
 aaggaaaaca cattaaatga ggcaaaaaac cataggaatt gaaacggatt aggaaccctt 120
 gtattcaatg cattaaaaga aagaatgatt angaaaaaag gaattcattc cacaanggaa 180
 ttaaa 185

<210> 465
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F11

<400> 465

cgcggtccgag gacgcatccg cccacgcgtc cgcccacgcg tccgagtatc ggtagaacag 60
cctgtgtatg aggttgaaaa gaagaccgca gaatatgaga taagaaagta ccccagctta 120
agaatagctg aagttcatcg ttcagactgg aaaaaagaag aatggctcgg catacgactt 180
tgagtcgcaa gcatttcgag tgttggcgtc gtacattggg gtatttggag aacccaaaaa 240
caaagatagc tccaacacgc atgttaagat agcaatgaca gcacctgttt tatcacagcc 300
cataggggtcc gtggaaacaa gaatggacga cagcagtcta gcgtttatat tgcccaagga 360
gtatgcagag caacaagaac ctccacagcc attagacca cgagttcact tgcgtattgt 420
acctgtcaga aa 432

<210> 466

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F12

<400> 466

ggtcgacgac gcgtccgacc acgcgtccga ttttttgaag agtattcttt gcagcttcca 60
tttcgtgcat ctggcactga atttccacaa caataataga agaaattaat ctataatact 120
ctattttgtt catttcggag atcttggcaa cttgcaaagc aggtgacaaa gcctttgctg 180
gagctccaac gcgtaaaaag atatcagctt cccaaagttt cgactccaaa taatcaagcg 240
gtttttctag tgcaagattt agcacaatat tgaaaagtca gatgctttat atctatacct 300
ttggaaatgg aaagcttttc ccattcacta cgtattcttc gtgcatattc gtagtcatct 360
tctaacattg ccaaagcaca atgtgccttg tggaccataa gcgtatgatc tgtgttactg 420
gaattttcta tagaaggaac aata 444

<210> 467

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F5

<400> 467

atggaaacaa ggattgcaaa taatatgtcg tcatggagtt tctgtggatg gtaatagtag 60

tgcatgtcaa ttggtcaagg aagaaagata tcccaactgc agtcgcaagt tgaacgatac 120

cgtttcctcc gacagactcg tagaaataag caattgtgtg gatatggcaa aatatattca 180

acaactgggt gcgcaagatt attcttccac ataaaccgta tttgttgct ccaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaacaaaaa aaaaaaaaaa caaaaaaaga 300

aaaaaacata aaaaacaagc aaaataaaaa agaaaggaaa aaaatcaaaa ga 352

<210> 468

<211> 168

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F6

<400> 468

aaaaagaagg gtatggaaga aaagagcaaa gagtttttgt ccatcaagaa gactgtgagt 60

ggagaacaag taggagaaac tgggtggagaa gtatatgtac ctctagaaag aacaaataat 120

ccttgaaatg tatctagaat agaataaaat cgtttcttct ctgtattc 168

<210> 469

<211> 372

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F7

<400> 469

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tattttgaat gtgagtgcag tggagaagag taccaataag agtaataaga taactattac 120

caatgagaag ggccgcttat cacaagaaga gattgagcgc atggtaaagg aagctgaaca 180

gtacaaggct gaagatgaga agcagaaagt tcgcattgaa gctaagaaca gtcttgaaca 240

atatgcctac aacctgcgta atacactaca agaagataat gtaaagaaga ctttggcaga 300

gagtgatcgt gagacacttg agtccaaagt gaaggaaact ttggattgga ttgatacgca 360

tatggatgcc tc 372

<210> 470
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-F8
 <400> 470

acttccgcag cagtgcctat ggaagaagtc actggagaag aaagtggggc tggtgctagc 60
 gcaagtgaga aacctagaaa gagatttgaa gtgaaaaagt ggaatgcagt agcggttggtg 120
 gcgtgggata tcgtcgtgga taattgcgcc atttgtagaa accatattat ggacttggtgc 180
 atcgagtgtc aagccaatca gggttctgct acttcagaag agtgtacagt ggcttgggga 240
 gtttgcaacc atgcctttca ctttcaactgt atttctagat ggctgaaaac gagacaagtg 300
 tgtccttttag acaatcgtga ctgggagttt caaaaatatg ggcggtgaaa cttcttcatc 360
 tggaaaaagg agacctagac aaaaagagc tcttatttaa agaaaaa 407

<210> 471
 <211> 459
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-G11
 <400> 471

ggtcgtagat tcacgggtcc gacgacgct cgcaccacgc gtccgcccaa tgttcctctt 60
 cgactgtatc gcggacatag aatggcaaca gataaagtca gctaagaaga tatactctta 120
 tgtaaaagaa tcaaaaacca aagaatattt ggagctagac gattcggtgc agcagccagt 180
 ggattcatct tgtagcacca agtggctggt tattgcaacc ccactggttg aagttgcttg 240
 tactgatggg cagcgaattg aaatgattcc tttgaagaaa gatataaagg aattgttttt 300
 ctctacttta aagaagaact ttgagtcgaa cgaagcgtca tgggagtgca gtgtagttga 360
 aaccgcagtt gctgttttta tccagtatta tgaacagtgc gtggaacagt actatctagc 420
 aggcaaagat tatgagctac ctggttattc caaagttaa 459

<210> 472
 <211> 325

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-G4
 <400> 472
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 agagagggac tatgagcgag aaggtggata gtcgagaggg aaaaagccca gaagccaaga 120
 taaggtatca aagtaaagaa agaaggaaaa ggagaagaag agagggtagg cttagaagca 180
 gcaaaccaga gaggaaagcg ttaaagcatg aaagaaaaga aatccgaaaa agaagagaaa 240
 aaggtaagaa agaggaccga atcagggtaa gaagtacagg agcaagaaga gaagagagaa 300
 tgctgggtgg agtagcgaaa caaga 325

<210> 473
 <211> 391
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-G7
 <400> 473
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 tagacaagat tcctccgttg agtcgtattc tattactcat ctttattttt ggttcctttt 120
 gtgttttggtg gttttctttg gagccatatg ttttactcgt tcctggactg acaatatctc 180
 gcttttatat ttggaatgta ttgacatata gtttggtgga tgttcccttg tgggagatgg 240
 gattgttggt tgctccttta ggctttcttt attctatggt ggagcgttct tgggggggttg 300
 ttcctttggt gttatttata gggtttgat ctctttctag tgcttgttct agtattcttc 360
 tactagttgt cttgtacact tggaaaagag a 391

<210> 474
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-G8
 <400> 474

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 tgtgaagctt ctacgcgttaa ctgggggttgc tgtaatgagt acgccaagtt ctcgttcttt 120
 agtaggaagc ttcggaaaac ggtattttctt tgcgcgaaac acttgacttg gattctggaa 180
 gagccggaac aagagatttc aggtgaaaga gttagagatt atgaaacagt cgggaaaaag 240
 acaacagcgt ttcttgtaat agaccctgag ggtgggaaca ggccttgtat ggctgtacat 300
 gcagcaggca gaaggagggg aaaagtttgt ggtcttcgaa acaccttttg tttctacagc 360
 tttatcttta aagactatat atatttatgc acgggacaca ttttttaggg atanacggtc 420
 aagtagccca cgtagtatc 439

<210> 475
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-H10
 <400> 475

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 gacgcagtag atcagagagt aacacatgca agtaggtaaa gcgaacgggt gagtaaggag 120
 gtgtgaaaga gtggaagaac atgaaagcac agaagaatgt aagaaatggt tagagtaaaa 180
 accataaagg aggcaaatac gggaaagcag taaaagaaga aagagaaagg aaaaaaactg 240
 agtatcagga agaaaagagg gagtagatga ggaaagaaag atcaaggaag taagagtaag 300
 agaaggagta atgtgaatga aagcaggaaa gtatttgaag aagagagtgt aaagcgcgta 360
 ccttttgcac aatgtcccag cgagtgaag 390

<210> 476
 <211> 347
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-H11
 <400> 476

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 caaccgaaat aatagttttg attcgcatat ttgggggttg ttgccgaaag aaaaagtgat 120

cggcagagcg atattcaaat attggcctat tcatagggtt gggtaggatcg aacattgaac 180
gcagtcgag ttgccgccag atgcgtaggtt tattatatca tgttgacatt ttggggcggtt 240
gtgacgaatc gaaaggtgcc gttactcggtt gcaaatagac gagaacgtct ctcatttgca 300
cgacgttggg aaacaatcat ttcataaagg tcatctacca tcgttcg 347

<210> 477
<211> 419
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H12

<400> 477

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tacaatggac tgcattcatc atgtggcaac gttgacaggc gccatcatca tcgcattggg 180
aaatgactat gccggttatt gggccaatca ggaagcggtg gcgcaacgaa tagaaactgc 240
ttcgaaacga tgcggagaaa agttgtggag aatgccttta gtgaatgaat atttgagtc 300
tttgaagagt aagattgccg acttgagaaa tgttggtgga agggctggtg gctccattgc 360
tgccgccttg tttttaagag aattcgtgaa gcagtctcct tgggcgcata tagatattg 419

<210> 478
<211> 398
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H4

<400> 478

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gcgtgggtaa tatgaataat agaaaggata acaagaacaa gacagtagat atgaccaaag 120
agtttttttag ggagcctcca agacgtggaa gaggaggaaa tagtcgcggt attggaggga 180
ataggagagg aggaagagga aaaaccggtc ctccaaatac ttccaataat aactatcgac 240
gtgaagaagg aatagtggaa gaagcaagaa atgatcatag acgagctgct tctcgatcga 300
gaggttttta tgctcctcct cgacgtggtt tttcttcttc gagaggagga ggtcgggggtg 360

gctttcgttc caatcgaata accacgccaa gtattttca

398

<210> 479

<211> 386

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H6

<400> 479

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ctccgtaatg tttgcaacgc acaacttgga ttctatggag agagcagcta ctgaaatggc 120
tgaaaaacag ctgcacgcta gcaatcctaa cgtttatttc gctcaattgt atggaatggg 180
agattctatg acaatggcct tagcgaagga aggttataac acttgcaa atcgttccatt 240
cggacctgta caggaagtga tgccttattt aactcgtcgt attgaagaaa atcgagacat 300
tcttggcggt gcttcaaagg aagtcggttt gtttggggaa gaacttaa acgccggtcct 360
tttgaaggca gcttgagtct gttttt 386

<210> 480

<211> 445

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H7

<400> 480

agggaagtat gaccagtaa tgaggagtgg agtaaacaga aaaggaagta aaaggaggga 60
atgaagggaa gttatggcaa aaacacgtgc cagcagcagc ggtaaacgt gtgtagcaag 120
cgtagagcag aagaactggg tgtaaaggtc gagtagtaga gtaagtgtaa aagggaagg 180
aaaggagaga aagaggaaag ggatgaaatg cagagatctc tagagaaagg caagaaagaa 240
aagaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaacg gattaggaac 300
ccgtgtagtc tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc attccaccag 360
ggggagtaaa ggcgcaagaa agaaaccaa agcaatttag aggagaaccg gaaaaagggg 420
tggtacacgt aaattaatcc gatat 445

<210> 481

<211> 425
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-H8
 <400> 481
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 actaaaagaa cttttaccac aactctccaa aagtgtggca gaagccttac ataaaccaga 120
 acattacatg tgtgttgggg tcacaaaggc ttcaatgatg atattcgggg gctccgatga 180
 gccttgtgcc tttagcactt tatcatctat cgggagtatc aatcgcaagt ccaacgagaa 240
 agttagtgcc attgtgtgtg atctcctgca aaaatacttg aaaatagcgc cttcaaggac 300
 ctatattcaa ttcactgatt cggcacctga aaactttgga cacaatagtt ctacctttta 360
 atcggatatt ccgtttgtaa tgtcgtccgt tgtgaaaaaa aagtgtgttt tgggttgtgc 420
 attgg 425

<210> 482
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-A1
 <400> 482
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 tttgtcagt atttttgggc caatcaatta tatttgttgt gcacctgtag ctctcgtagg 120
 attatttggg gcagcggtag attttttggg tgtttcaatg gagtgtttgt caaaggcgga 180
 gcagtctgcg tggcttaaaa ccagttacgg agacgagtag tataactcgaa agagatccac 240
 aacgaagaaa gaactgtttc tatttacctg tttcaatgaa agtttcggat gacgccacaa 300
 agctacttgt tgtgacggga aataatcttg aactcacaga agcgttgac aagtatgttg 360
 aagaaaaagt taggaaatcc atttcaaa 388

<210> 483
 <211> 310
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A10

<400> 483

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tgaacaagct tcagttgcta tacgtaacca aacaagctgt ttcaaaagca tggcaaagag 120
aacagaaaag gttatactcc gagaagaaat cagttgcaga aggaactttg ggaagcaagt 180
ggaaggaaag agaaactgca caagagagcg cgtactttta tcgtgaagat gagcaggcag 240
tacaaagggt agcagcgaaa cttcggcagc aaattgagcc atcggaggaa gtactcgccc 300
aacaaagaaa 310

<210> 484

<211> 436

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A11

<400> 484

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agtactatac cgagcagaag atccaacaaa agtattgctc tcgctatgtt actgaagaag 120
aagtacaaag caagcagtgc atcaagtatg tatctcttca gaagatcaag tacgagtcac 180
gctctgctca atatgaagtt caaaagatca agcagcaaca atgtactatg acagtctctg 240
aacaatacat acagcccgat acttgctaca agtatgtccc tgaacaacaa ttgggtgcctc 300
atacttgтта caagtattat tctgtaccca agtttattga aaagtgctat cctcagtatg 360
caacaacgga gaaatgtgta gagtatgagt atgttcata tgccacttct acaccttatc 420
catcggtatc tccaag 436

<210> 485

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A12

<400> 485

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caagtcggtg gtcgcgagct gctttatctt ttttgatttc tactgcggtt acaaagtctt 120
atcaccctca taataacaca caccgattatg tctccttgta tttcttgcca ttgtatcgca 180
actgggttca acgcgttgga attcatagcg ttccttttgt actagctaata gatactggtg 240
actccttgaa aaaacaagaa aacgctgata aagttcacag gaagacacag aagaaaggct 300
ccacaacgga ttccaaacaa gtaaaaaagg gcaccctcga gtcgcagccg gaagatggtg 360
cggaacaga cgtaaacct cctccaaaag 390

<210> 486
<211> 379
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A3

<400> 486

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tttatccatt ccaaattaac tccgtttcct gggggaaagg ggaaaacttt ttccccagcc 120
tccgcaagg acttgtggat ggggtgggccc aaacactgtt tgaatccggg gggacctttg 180
cttagggaat aagctctctt cccacagggt gtagcttcgt tatcgaggga attgggtttc 240
tccgttggtt ttcttacaac agcgttccaa ggattattat cctatgcagt tgctttttta 300
cttggtccgc taggtcgttg gtggtatata gagcgcatca atagacaacg aaggtctcgc 360
aatacccaac gagaaaaag 379

<210> 487
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A4

<400> 487

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gtttctagtc ccagtttctt cccagttgga tttaaaagaa aacgatatat gggcaattca 120
gctgggttg agtacaagtt ataataatga agtttccagt cactttacgg agaagcagaa 180
ctgggtaatg aatacaggag tctattatga gaggcgtttt gaaaagaagc gaccttcacc 240

tggtgcttgg caagacgcga gtagttccaa ttctgataaa gaaggtctcc atattggccc 300
 aaactgtcaa cttgtagttt gttctgttga taacttgaaa gacttcttgg gtcagcaagt 360
 ttatgaacaa ctccagaa 378

<210> 488
 <211> 355
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A6

<400> 488

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 aaaaaagca gctacggctg taaagtctgg attgaagaaa aagaaaggct ataagataag 120
 aacaaaggct cacttccacc gaccgcacac tttagagattg ccgagacaac caaaatatcc 180
 tcgcaagtct tttcccaaaa aaaccagctt tagatcaatt caaaattatt cgatatacctt 240
 taacaacaga gtctgctatg aagaaaattg aagatcacia tacttttggtt ttcttatgcy 300
 acgtgagagc ttccaagcca caaatacgcy acgcggtaaa gaaaatgtac aacat 355

<210> 489
 <211> 321
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A8

<400> 489

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 gacagcttca taaaaatacg cttgaacatc ttaaacaaca tcgaaccatg ttccctgcca 120
 tcgaagcaag gttcctgatt gtaaagacac gagtaaaactc agaatcgagt gttttttgga 180
 caacaaaaag ttctactgag ccatcaaagc attcaaaacc aaaagttttg gataactttc 240
 ctgtagagac cctatgaatt cctggcaggt gctgttcaaa aatgtaatag aacagtttgg 300
 cattgaaacc ttatcatctt t 321

<210> 490
 <211> 398
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-A9

<400> 490

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aagaggaaag gtttacgaga gaaggaagta gaaagaagag agtgtaaggc ggcgtcataa 120
tagaaatccg aaaggagtag aagaaaagag agagaagaaa gaaaagaaga gaaaagccgt 180
actgaagacc gacacaggta ctcgaggaga aaggagaccc aaattaaggt gagagaatgg 240
acgataagga actaggcaaa aggatatggt atctgcggta gaacatatga aagaagcagc 300
accgactgtt tagcaaaaac acagcactct gcagaaaaga gaaaatgtaa agtatagagt 360
gtgcggcctg ccaaatagta gagaagaaat cgatgaaa 398

<210> 491

<211> 381

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-B1

<400> 491

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aaaaaaaaaa aaaaaaaaaa aaaaccaaaa aaaaaacaaa aaaaaataa taataagcag 120
aaggaaaaaa aagggggggc ccccaaaaag gttccaaact tatttgccct agatggcaaa 180
ttgagacccc tgccaaacgg ccccaaaaat tcatttcacg ggccgtcttt taaaaacttc 240
ttgtctggaa aaaccctggg ttaccctaaa taaaaccctt tgcaaaaaat ccacttttcc 300
caacagggtg taataacaaa agggccccc ccattgcccc ttccaaagaa ttgccctccc 360
caaaatggga aagggacccc c 381

<210> 492

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-B10

<400> 492

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tcagtatcaa aatgttgctt tatcttacta tcatggggtt ctccataact atcttggtct 120
tcatgggaaa gaactcggat ggtatttgga tacatagtgt gccacctgca gaacaatatt 180
gtgcatacaa gtcttcattg gaggtgaacc accatggaat tgcttcctat tgcaagtata 240
tcgttgccgt agctgctatt gggttgggta tctcggtttt ccagttttgc tacgggtctgt 300
tgggggtatct tttcaagtgg caacaaaagt tgtgggtatat ttaagatgct ttcaatctat 360
ttttctgggc ttggtggttg gttggtgcta tcgttgctac cgctgc 406

<210> 493
<211> 398
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-B11
<400> 493

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tctgttcagt atcaaaatgt tgttctatct tactatcatg ggtttctcca taacgatctt 120
ggctctcatg ggaaagaact cggatggtat ttggatacat agtgtgccac ctgcagaaca 180
atattgtgca tacaagtctt cattggatgt gaaccaccat ggaattgctt cctattgcaa 240
gtatatcggt gccgtagctg ctattgggtt ggttatctcg tttttccagt tttgctacgg 300
tctgttgggt atctttttca agtggcaaca aaatttgtgg tatattgaag atgctttcaa 360
tccatttttc tgggcttggg ggttggttgg tgctatcg 398

<210> 494
<211> 344
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-B12
<400> 494

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ctgttttcat cggttgctac tcgttcaacg agtattccat ggatattgta gagtagtatc 120
tcgagtttta ctacagtgac ttcgttaaag gtcacttcta agggcaacat gaatacaacg 180

cttgtgcctc aagtattcag tctgtcgactg tttttgcaaa gccaat AAC GTGCAACCCA 240
gactcagtca ggTTTTTacc tgggagataa gttattcctg acggaaacag tatcgacttt 300
cacaacgcgt atgctgctca aatttcactt ctggcaaaaa gact 344

<210> 495
<211> 369
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-B3
<400> 495

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cgagaacact tattggctag attctgtcaa gtttctgtgg atggaagtta ttcttcgggt 120
tataagactg cggatgagaa gtttgcagca caattgggtg ctttaactgg aagtcgtgtt 180
agtatttccc gttccgctat gaatcagtcc atgggtccaa atagggagtg gaaataccta 240
ttatgaacta tcaaagtcac cagatgagat taatgccacc attggctgca acttgtatta 300
tgactttgtg tgccaatcat ttaaagtctc gttatcgcaa ccgagccaat gagaatttaa 360
aggaattgc 369

<210> 496
<211> 377
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-B6
<400> 496

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ttggatatta ttgaaaaagc tcaagggttc tttcaaagaa gtacttattg aactcggaaa 120
ggataataaa gaaccctggt ttttggagtt aaaccacta ggaaaggtgc cagtcctgag 180
ggtacgtgaa aaagcagaag cctctgaaaa agaagcagtt atttatgagt ctttgggtgtg 240
caatgaatat ttgaacgaag tttttgcgga aaataagctt cttccacaac atcctgcca 300
acgagctttg gctagaattc tcgcaaccag agtagatggt ctagtctctg ctatgttcaa 360
actactgaaa acaaacc 377

<210> 497
 <211> 354
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-B7

<400> 497

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aacctcgcgt ttctcagttt cgaccacaag acgttggtct tcctaaagac tttcttttaa 120
cttcattttc tcgtttaaag ggctgaggat gtaagggtcc tcaggcagaa ttagaagggtc 180
tcttggtcgc ttttttgacg caaccacaca gttgtaacct gagtcaagga gttggttcgg 240
attgctctct ccagccaagc caagtacctg atgtgtatct agcctctaca acagactttt 300
tctttccgct cgtggaagac ccttatacta tgggcaagat tggagcagcg aacg 354
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<210> 498
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-B8

<400> 498

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taatatcaaa gagcgtgcat attccattcc tagttcggtg agaaacctac actcctcgcc 120
acgtttatcc gtacaaaaag aagaaagtca ttcagacacc aaagggtgta gttgtgtttg 180
tggtctgaaa agccaagctc acttgatatt cttttagcca gttagttgga aaacagtagg 240
agcaacattt gcaataggtt caggtctttt atttttatat gcacaaatga agaataagaa 300
aatggaacaa cttcgttaca atcaaaaagga gttgggacaa ccagctatcg gaggtccttt 360
caagctttta gata 374
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<210> 499
 <211> 391
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-B9

<400> 499

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cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag tatagagtgt 180

gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga aagcgagtaa aagatgaggt 240

atagagaatg gcggtcctaa cagtaaggat ccaaaggtag cgaagtaa at agacgtttga 300

aaggcggtcca gtatgaaagg agaaacgagt gtagcactgt ctagtctgcc aactcagcga 360

aacagcaata actgtgaaaa tgcagtaa ac t 391

<210> 500

<211> 392

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

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<400> 500

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tggttcgagc catgtttttg ctatcaacaa agatggagtt gccttttggtt ggggttgtgg 120

tcgataatcat tgttttggtg tgcaccaaga agtcgacttg gtccaacctc aagccttgga 180

gcatcttcct gggccttgga aacagttggt ttctggtgga ggcatactt taggacttac 240

aagaggaggt caagtgtgga catggggagt aaatcatttt ggttgtttag gtgttgggga 300

acaaaaccaa caggtttttc caggagaacc taggatggtc gagaaattgt tgaagattgc 360

canagaacct attcagtgga ttgcagctgg at 392

<210> 501

<211> 249

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C11

<400> 501

gtgggttgtg gagtaagtgc gcttggcaac aaactaaaag atggcaagaa gaatcatcgg 60

agcttatatg tctgacgcta ctgtagcgtc tctatttagt gtgaaaatgt tgttctacct 120

tacaatactt gcgttctcta tcactattgg tggtcctatg ggtaagagtt ccgacggtat 180
 ttgggttcac agtgttccag cgaaagacga ataatgtgca tacaagtcct cccttcaagt 240
 taaccaaca 249

<210> 502
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-010-Q1-E1-C4
 <400> 502

acccaagcgt ccggtagagt aagtgtaaaa gggaaaggaa agagagaaaa agaaaaggaa 60
 taaatgcaga gatctctaga gaaaagcaag aaagaaaaga aaggaagaca cagtaaatga 120
 ggcgagaaag catangaagt gaaacggatt aagaaccgt gtagtctatg cagtaaaaga 180
 aagaatgagt aagaaaaagg gatcattcca caagggagta aangcgcaag aaagaaaccc 240
 aaagcaattg acgggaatcg gaaaaaaggg tggatcacgt aaattaatcc gatgtaaacc 300
 gagaaactta cctctccaag aaggtgttgc acggctgtcg aaagaacgtg ctgtgaagtg 360
 agagaacgta cgaaaaagcc aagttaagg 389

<210> 503
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-C6
 <400> 503

cgcaaaggcg tgtccaaggc atttgtgaaag agtctgtgaa aacactttcg aagccttggg 60
 caatatttat tgaagagttg aatcgtagat ggcaaaaatc ttccaacaga cttttgttac 120
 ttcttggaaat ttggtttggg gcctttgtcc ttttaacaac gttgtttacc tgcattcttt 180
 tgtacaagga tagccacaag tcgccctcga gaaaggagaa atcaggaaat aaggaaaaca 240
 aggagcaagt agttaaggag tcctccaaaa gcccgagctc gtctctaagg catcgagttc 300
 ctaaaacttc ttaaggggtt ttgcgaagaa cgcttacact ttttttctt atgtagtccg 360

gattttttgca accgttttgac gttaaa 386

<210> 504
<211> 376
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C7

<400> 504

ctcgaggttt gcatgtttca aagcaagtcc aatcttttga agaaataaccg ggttgtggtg 60
tgcaatcgat cgtctccaat catgaaatat tcataggaaa cttgaaatgg atcatctcca 120
aatgcggtac ctcacaagaa cccacaaagg attggttgga taaggaatat ttagaacagc 180
tacagagttg gatgaagaac ggaagtactg tcgtggtagc tgccatagac gatactcctt 240
gcattgcatt tcgcgtcgat gatgagttga gaccggaagc caaacaagtt gtttcgtttt 300
ttagagaaaa gcacaaaatg gagtgttggt tagtaaccgg tgataacgat agcactgcat 360
ttgcagtagc cagagc 376

<210> 505
<211> 263
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C9

<400> 505

aaatccacaa tcgggaaatc actagcgaca aaaagcaaaa tgttccttta gagtatctag 60
aacaagacac ggagtaattg aaggaatggt gatatcgggc ttaagtatat ggtcacgtgt 120
catctcattg tgaacagtgg gataattgta ccatacacag tataccacac gtaccgttgt 180
cacaattcct gataggattg gccaaagatac ctgcgggtaa tttgggcaat agccaagtaa 240
agaatcgaag ctactagctc cta 263

<210> 506
<211> 149
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D11

<400> 506

acaaagtaca agttgtatta acccaacaac attggaagg aaacagttcg tggattattg 60
cattgaaacg attgatagaa gctggaaaaa ccggtagtta attgttgat aatagcatcc 120
ataaactaat agtaaaataa acggctttt 149

<210> 507

<211> 322

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D3

<400> 507

acgggtccat acagctatcc ttgtcaaact tatgagcagg tttcaactac ttaccagtgt 60
ggtcagtacg agtccaaca agtttactac caatgccaaa agtataagga ggttactcag 120
caagaatgcc agtacgtcca agagtcgtat tgtgtcgagt atgaagaatg tcagcaagtt 180
accaggaag tttctccttc agaaattgtc tactacggtg aatcttcttc tagcagtagt 240
tactactact agaacacttg tgaaatgcgc aaagtcgcaa agtagagtgt tcttttttga 300
ataaactgtt actttttgtc at 322

<210> 508

<211> 371

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D8

<400> 508

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gaaaagaagg caagtagagg gcggcccgag aaaggagagg gcgtaagacg tgatacagag 120
taggaagaaa agagaagaga gctagaaagg aggtaaaaga agagtaaaag gactagaaga 180
ggtacggaat tcacgaggaa ggagcgtgaa ggaaggagga atcccaagta atcgaggaag 240
aaaaagcttc ggtgaaagcg tgaacggaat ttgtacacac tgcccgtcaa gttctggaag 300
tgtgctagga ataagcagga gaagtagaag agagtaggaa aagaagaaag gaagtgaaga 360
cgtaagacgt g 371

<210> 509
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-E1

 <400> 509

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 aaaggcagta agttttttta agcatcctca ggtgaagcct acagcgggac agagaaaagt 120
 agatttttta agaaagaaag gcttgacgga ttaagagata aaagaagcgt ttcaaagaac 180
 tggacagata tatccagaag atagtttttc tggaaatgtg gaaggagaga agtggaattc 240
 tcctccaaag gcaacagcaa caccggataa tttaccaaag actgccgtac caaacgagag 300
 tgtctccaat caacaggctg cgccagcttc taagggcaaa gtatattcaa acaatgttcc 360
 ctccaaatcc aacgacagtg aca 383

<210> 510
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-E10

 <400> 510

 aaaagtcatt ggaaaagtgt atcctacaag aaatatgaac ctacaagttg tgtcaaagga 60
 cgaacggagc catgtcatat tcgacaagtt gcagaaatag tttctcaact gtttcaagtc 120
 tccatcgaac aagtagccaa acaagccttt cataacacca tgaaaatatt ttttcccaac 180
 gagtccgaaa gtggcaatta tgagtcgctt tttgaaactg ttcgacatca tcgctcttaa 240
 gagcgcgcca tttctctatt agcatttttc tttgtctcgt tgcagttttt ctaagacggt 300
 ggccatttga tatttcatga tgggctgtcc tttgcggggt ctcaaactca actttttatg 360
 ctacaaaaca gaacaatata ttcaacccaa tagaaattgt cattattgac aactaaa 417

<210> 511
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E11

<400> 511

gaggattcga ggagagagag agagacagac agatggccaa cgctgggtcaa gatggccttg 60
tgcaagtcaa caaacataga aaagtaaaga gattgcaaga agataatatt ttgaatagag 120
cactatcaca accaggagat gtatttctgt gcttttgcaa catccagttg ttggtgaatg 180
cagaaagagc tattatagga aatattactt gtccagaaag tatcgaattg tgtcgtctat 240
tagctggaca tatagcagtt tggttcgatg aacatttgga tgactttcgt ttggaagcta 300
tcttggggagc actattgtgt acttggttaat gtgagtgga gcgttttgaa ggagaattgg 360
gggtacaaga atgg 374

<210> 512

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E12

<400> 512

cccacgcgtc cgccacgcg tccgcggacg cgtgggcaag aaaggaatgc aagtgttcgc 60
agaaacgaag catagttagt atcccatcga aaatacatcg ttttggcgag tcacgaagct 120
attctcga aaacaaagtaaa caccgacatgg ttggaaactt gcggatggga ggtggtgtac 180
ccaaagtgcc ctataaagcc cctgggtcaac aaaattatga gtttatagat atatttaacc 240
gtttctatag agaaagaatt atttacattg gtcaagaaat tgacgaagat caggcaaacc 300
aatcatagc gatattattg tttttacaaa gcgaagacga tcaagcggaa gttcagttat 360
atatcaactg tccaagaggc tttg 384

<210> 513

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-010-Q1-E1-E2

<400> 513

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ccgaatcagg gtaagaggta naggagcaag aagagaagag agaatgctgg gtggagtagc 120
gaaacaagag aagggaagta aaaggtaaga aagaggaaag gtttacgaga gaaggaagta 180
gaaagaagag agtgtaaggc ggcgtcataa tagaaatccg aaaggagtag aagaaaaggt 240
ccaaacaaga gaagtcagca gtggggaaaa ttgggcaatg tacagggag tatgaccag 300
taatgaggag tggagtaaac agaaa 325

<210> 514
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-010-Q1-E1-E3

<400> 514

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tacggtagct attctaattgt aaacgatatc gaagtatttt ggcggcttca cactgagaac 120
caganaaatg ataagaaatg gcgatgtcca aatcgcgcg attttttcga ttcggacgac 180
tcgccaacgt tccataaatc gtttctcccg tacatatcac caattcctat ctttcgtcat 240
atttctcttc atacaaaaga aaatacgtac tctgtccaaa tagaatactg cttgcttcca 300
gtgtgtagtc ctagcctgtg gtccagtggg aaagccaagc ggtttatgac agtgattgaa 360
gaacacatca aaatgtgcaa caaatgcatg aataaaatca tttcgttcag ctttc 415

<210> 515
<211> 367
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E6

<400> 515

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ctgccaagag ttgtgttcaa tcaactggcg ttttacttga ctagttgcta cataggagag 120
aaaatggggt ggatattcag aacccttct aaagacaatg ctttccaact ctggaagttg 180
cctatctatc ttactttgta ctctttctat catgaaatta tattttactc tgctcatcgt 240

tggctgttgc actccaagtg ggggtttaac ctgttgggac acaacgtcca tcataccacc 300
 aagggctctg ttggtatttc gcaacattat atgagtgtca ttgactatta attgggaatc 360
 gggttttt 367

<210> 516
 <211> 332
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-E7
 <400> 516

gtgcttccat aggagaggta gttgtcattc tgttggcgca acttggtcat aacatgtatg 60
 ataggtatat ctagcgaaaa gctttggctg tctacagat agaattgtat tcgattcacc 120
 ggtaaagact acgaaagact tgatgcaggc tttgaatgac ggaatctata tcaatgcaga 180
 taattttcaa gaacttgaga agatacaaga atgtttgaaa gatgacaaca ccgatgacaa 240
 aaggccaaaa aagtgcgcca aagtcggcct tcgtatcaac cctcaagtag gttcaggttt 300
 attacaggaa accagtactg ctagtgccca aa 332

<210> 517
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-F11
 <400> 517

ggcagttgta ggataacttg cgtgtttctc gaaagtcgat ttgtattatg gagcgttatt 60
 caaaagaaca gtgtttgtgt gtccactact ttaaataata gaaactggag aatgcaaaat 120
 aacaacgaaa ataactcacc taaaagatat ccttttgaag acgagtggag agaaaagttg 180
 aatagaaaga tgaaacagga aaaaatagct cgacaagtta tgtctcaagt gcaagagttg 240
 agatggaaag aaagtttgga ggggtacatt gagaacgaag tggaacatat tcgaaaccac 300
 gtcagtaata attttcgtta tcatcagcca caaattatga acaaaggtgt tgaaactgca 360
 aagcgtgtta gtggcaactc agttgcttcg tggaacaaac aaattttt 408

<210> 518

<211> 390
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-F12

 <400> 518

 agattgcaat atcacactgt gcaagcgctt tatgaattgc atgttttttg agatcacaca 60
 aacacttgta cactgaatga acgacgatg ggtactaact gtgcattttg tatagatatc 120
 aaggatgtca aatatgttat caactacgat ttcccgaata ctatagaaga ctatgttcat 180
 cgcattgggc gcactggctg tgctgggtgcc cttggaaagt cccatacgtt tttcactccg 240
 gataaattcc gtgttgcgaa agaattagtt aacttggtgc gagatgctgg acaggacatt 300
 cctcccgagt tggctcgttt gataaaaact tcgtcctttg gcggtaacaa cagaaacttt 360
 tctcgttatc gaagttacaa ttctccgggc 390

<210> 519
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-F2

 <400> 519

 agcacgacaa gggcgacagt ctggagtcgc tactggaaga cttgtggaaa actcctcttt 60
 cagtggcttt tccaaaagga cagttggaaa gggcaacgaa atataagaat gggtacaaac 120
 ccaagatgtc cagcaagttt ccctaataaa agtggctcag atgccggata acgaagacag 180
 tatttcaata gttcactttg acgaaaagtt gcttaaaaag gcattccttc ctaataatgt 240
 atccatttta gagcctttct ggatacaaaa agaacagcct ttgcacattg cttcccactt 300
 gaaaaatgcc catattagaa agatcaaaaag gaagagacaa gactccagtc ctactgatat 360
 ccaagtatac gaacaaaaga agaaaa 386

<210> 520
 <211> 105
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-F3

<400> 520
aaagaaacca actggaatc cccaataac ggggaaccaa accggaaaaa cccaacaagg 60
aaaaccccct tttcctttgg gaaaaaaagg aaatttattt gaaaa 105

<210> 521
<211> 347
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-F5

<400> 521
agtgcacg agatactgaa tgattcgttg ttttattatc agcggcgagg tgtcagtggc 60
aatgatggca gtagccaatg cgggaggaaa atgacgtggg aacgaagtgt cacggatatg 120
tcaccgatga tgatgatgac tcgtagtgtt attgctgctt gtggtcgtag tagcagtggg 180
tccaaagagg aggaagacaa caacaacaac agtactagta caagtagcta tcctagtctc 240
tcagccattt ccagttttta tcgcaataat gttgtcgctt aaagaaattc tccatcagga 300
attccaaggc atctagtggg gcaaaatcaa acaaaggaa ctactcc 347

<210> 522
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-F9

<400> 522
accacgcgtc cgcggacgcg tgggcggaaa cacgctcaat ttacggccga tatacgacag 60
tgttttgtgt gaacatatac taactcgact ttgggtatcc aaccaatata tttctaattc 120
ctcctatata ctagtttttag ttgtatgagt ggaatatata tatatgtagt tatctccttg 180
taacattcgt tggaatatct cagataatac atgccattgg actgctatct tcagcgagaa 240
aagtatacat ttctctccac aagaacgcag catgtttcat cctcggaatg tacgtatatc 300
tgagatatg cttacctcaa atagaaacca tcgtctgcct tccataaaca gtcaactgttc 360
ttcttcttaa tgacagaaac ttccaagtgc ctttcgatag gttcaggata aacatatctc 420

<210> 523

<211> 377
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-G1

 <400> 523

 gaggaattcg ggaggtgaaa agatggtgtc tattatgctt tatttattct cgatgcagca 60
 gtcgatgaag gctcctttca cccttgtcga tgaaatgaac cagggaatgg accctacttt 120
 tgagaggaag attgtttccg tcatgattag tgatgcacga cattccacaa gttctcaagt 180
 gtttctcatt tccccgaaat tgctcactga tctagagttt ggaagagaaa cgaaaaccca 240
 ttttattttc aacggccctt gtgtcagtac caaacaggat tgttggaatc agttgctgtc 300
 aaagtatata gaaggatagt tgtgaattgt tttggtttta aatggtaccg taatatacctt 360
 tgttttatat gaattgt 377

<210> 524
 <211> 357
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-G10

 <400> 524

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 gtgtgtggat agttgggtcat gaacgaagaa atatctgcag ataataccta tagtagacta 120
 gtagctttga aaaaacttgg tgttgtaaaa aactttgacg aaattagaaa gtactctgta 180
 gcggtggttag gggtgggtgg tatcgggagt gttgctgcgg agatgctcgt tcgttggtgga 240
 attggaaaac taattctttt tgattgtgac accgttgaat tggccaatat gaatcgtctc 300
 ttttataaac cagagcaacg aggggaagaca aaagtacaag ctgcgaaaga aacgttg 357

<210> 525
 <211> 72
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-G3

 <400> 525

cccaagcgtc cggaaggcgc aaatttgtgg gtggtgtccg aaaacttttc aaccttgga 60
aaagtcctta aa 72

<210> 526
<211> 315
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G5

<400> 526

aaaggagtag aagaaaagag agagaagaaa gaaaagaaga gaaaagccgt actgaagacc 60
gacacaggta ctcgaggaga aaggagaccc aaattaaggt gagagaatgg acgataagga 120
actaggcaaa aggatatggt atctgcggtga gaacatatga aagaagcagc accgactggt 180
tagcaaaaac acagcactct gcagaaaaga gaaaatgtaa agtatagagt gtgcggcctg 240
ccaaatagta gagaagaaat cgatgaaagt gaaagcgagt aaaagatgag gtatagagaa 300
tggcggctct aactg 315

<210> 527
<211> 354
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G7

<400> 527

atgaataatc aacactgagc gaataggcct aaaagggagc aagcaaataa ctgctacgat 60
gagctgagaa cagcttagga tcacgtctat tgcgttcaag cgttgctata gtctcaaccc 120
aagctcaaca aaacccatcc gttttctcgg gatatagtag aatacaacgg ggattttctca 180
aatactttat acgagccttc gggctctatt ttcaaattctt gtgggctcgcg agcccagcga 240
gaaccaggcg tgaacgctag ggaagcatta agagatgaga tagctagcat ggttatccca 300
acacatgcgt tgagttactt gaaaccactt cagagctggt tcaacgacag tttt 354

<210> 528
<211> 216
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G9

<400> 528

gtccgacgtc taagaggaag gcttttccag agcaatcata gacaaaaaca aagctgtatg 60
taatatacgg tagctattct attttaaacg attacgacgt attttggcgg cttcagactg 120
agaaccagca tagtgatttt aaatggcgat gttcaaatcg cgcggctttt ttcgattcag 180
ccgacgtcgc caggttttat aaatcgtttc cctccg 216

<210> 529

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H1

<400> 529

attggacgtt gggatggaca aggtcgcaca ggtgaaagct tccgagtttt gggagttgtt 60
ccactacttg aaagggttcg gagacaaaag ttttctggta actggacaac tcatacaaga 120
ttggcaacga ggcactattg aaggtecgctg gtgggaagat agatggccag aaccacaact 180
agtcgtttgt tttcgcaggag gaatcactca aagtactttg ataatcttct cgataaactg 240
tgacacggcc tttcatgtac tttcacaagt tcagttgcat cctggtttct tattttttgc 300
agtaccggat agcgttggtc cgtccattga gaaagtttcc tcgatgcaga attattcact 360
aaagtttgaa acttgctaca cttatgtgtt gggaaacaca aa 402

<210> 530

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H11

<400> 530

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cactgtgcaa gcgctttatg aattgcatgt tttttgagat cacacaaaca cttgtacact 120
gaatgaacga cgtatgggta acaactgtgc actttgtaaa aaaaacaagg atgtcaaata 180
agttatccac tacgatttcc cgaatactat agaagactat gttcatcgca ttggtcgcac 240

tggtcgtgct ggtgcccttg gaaagtecca tacgtttttc actccggata aattccgtgt 300
 tgcgaaagaa ttagttaact tgttgcgaga tgctggacaa gacattcctc ccgagttggc 360
 tcgtttgaaa aaaaactccg ccctttggcg gtaac 395

<210> 531
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-H2
 <400> 531

gcgtccgcc aagcgtccga ttccacacag gagtatttcg aggaggcttt ccagttgtgc 60
 cagttgtgat caaataccga tatcgcaggt tttccccac ttatgaaact atacgcttac 120
 catattacat tttcaaactg tttacgcagt tgtataatga agctgaatat actttgcttc 180
 ctatttatta tccaaatgaa gtagagaaga aggacccac attatacgcc aataatgttc 240
 ggcaagtga ggtaatagct tgagtctcag tgaaatgatt ttgctgtttt gtaggaaaat 300
 tatgcaaaag gaactgaact gttccttattc tgaaagtcca tatcaagata agctcgagta 360
 tcatagattg ctacgggggc aatgcaagaa tc 392

<210> 532
 <211> 233
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-H3
 <400> 532

cccacacgtc cgccgaacga atcaagaaga aactttgggg gtaacaagtt aatgtggtgt 60
 taaaaaacct ttcaagcaac accaatggca cctccaagtc cggtaacaa aacctaaggc 120
 aaaaaaaggc cctaaagggt ttgccgttcc ccaataaaaa ttggaactta accgggttta 180
 aaaacttctt aaaacatttc ggccccaacc ccctgctaaa ggaaggaaaa cct 233

<210> 533
 <211> 373
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H6

<400> 533

ggcagacgta cgcgtcagcc cacgcgtccg gaaaagtttt tcacggcagc gaaggaacgt 60
agtaaaccat tggagtcgct cttccaaagc cggacgtcag tttccagttg ggcgtgtaag 120
tacattctta aagaatggta actatggaga aagagttgga gctggagcac ccgtgtattt 180
agctgcagtt ttggaatatt tgactgcgga agtggttgaa ctggcaggca atgcagctcg 240
tgataacaag aaaacccgtg tagttccacg tcacattcag ttggcagttc gtaacgacga 300
agaacttaac aagctgttgg gcggtgtgac tattgcttca agtggcggtc tcccaacgt 360
ccatcccaat ctg 373

<210> 534

<211> 344

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H7

<400> 534

cccacgcgtc cgagagaagg aagtagaaag aagagagtgt aaggcggcgt cataatagaa 60
atccgaaagg agtagaagaa aagagagaga agaaagaaaa gaagagaaaa gccgtactga 120
agaccgacac aggtactcga ggagaaagga gacccaaatt aaggtgagag aatggacgat 180
aaggaactag gcaaaaggat atggatatctg cggtagaaca tatgaaagaa gcagcaccga 240
ctgttttagca aaaacacagc actctgcaga aaagagaaaa tgtaaagtat agagtgtgcg 300
gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag cgag 344

<210> 535

<211> 168

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-010-Q1-E1-H8

<400> 535

gaaagaaaag aaagggaaga cacaataaat gaagccaaaa agcataagaa attaaaacgg 60
attangaacc cgtttagtca atgcattaaa ggaaagaatg attaagaaaa aagggattca 120

ttccaccagg ggattaaagg cccaagaaag aaacccaaag caatttac 168

<210> 536
 <211> 271
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-A1
 <400> . 536

cggacgcgtg ggcggacgcg tgggagctta tgaagctcta ggagactttg gtatggaaaa 60
 tgataataac gagcaagcag cagaagactt caaatcggct gtgcgttgct acgaggaggc 120
 tgggtatgct ttgtcgagaa cagtcggagg gctttatcat agtatttatc ttgcacttcg 180
 gtctattgac ncacacaatg caaggaaata tttgaagctt gccgcacagg tggtcgagaa 240
 gcgtatatca gagagtcaga aacaggaagg t 271

<210> 537
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-A10
 <400> 537

gaaagaggca aatacgggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc 60
 aggaagaaaa gagggagtag atgaggaaaag aaagatcaag gaagtaagag taagagaagg 120
 agtaaaggcg caagaaagaa acccaaagca attgacggga atcggaaaaa ggggtggatc 180
 acgtaaatta atccgatgta aaccgagaac cttacctctc caagaaagtg ttgcacggct 240
 gtccaaagaa cgtgctgtta aatgagaaaa cgtacgagaa agccaagtga ggaaaagaaa 300
 gcaagtagag ggcggcccga gaaaggagaa ggcgtaagac gtgatacaga gtaggaagaa 360
 nagagaagag agct 374

<210> 538
 <211> 343
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A11

<400> 538

agtgaacga gttggcaatg agtgagttgg tgcgacctgg tcgtttcttt gatagcggct 60
ttggtgactt attttcttgg acgaatgacc ctttcttccg tgatgcatgg aacttgatac 120
ctcgagtagg tggagctgag tctcagttat ggtcgccgag aatcgacctc attgataaag 180
aagacgcgtt tctggtgaaa gctgaggtac ctggagtacc gagagaaaac attaaagttg 240
acttgaaagg ggatatcttg agtgtgtctg gagaaaaggc tgacgaaaaa aagtcggatg 300
aagaacgaga aggaacggta ttccatagga tggagagaag cta 343

<210> 539

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A3

<400> 539

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gagacatcac gcaaaaacia agggaaatca cgctttccaa atttagagaa ggcttattcc 120
aggtcttaat tgccactgat gtagcagcac ggggtttgga tattagtggc gtcgatttag 180
tgattcagta tcgtattcct gaggacattg atatgtatat ccatcgcgct ggtcgactg 240
gcagagcaag aagacaagga acttgtgttg ttttgtatac ggatgaggag cgaagtaagc 300
tgaatttgat gcaaaacgtt tgtaagatac gttttcgttt agaaagtcct cttccgtgc 360
aacatgtgat agagactaaa gccaaaagtc tcttgcgttc cattcaagcc atcgatacga 420
aaa 423

<210> 540

<211> 168

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A4

<400> 540

cgtcgggaat gcgcagcttt agtcaatgtc gcaagtcgat cgatattcta aaaaacaact 60

atacctgtcg tacgttggag caacatagcg aactggcaca aaacatagcg ttgcgtcaag 120
tctcgaaagc agagtttcag aaatccgaag acagtccttt tgatgccca 168

<210> 541
<211> 216
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A5

<400> 541

ctcacgcgtc cgaactgtcc tcacgagaag aataaggagt acagctatcc ttgttaaact 60
tatgagcagg tttcaaccac ctaccagtgt ggtcagtacg agtcctcaca tgtttaccac 120
caatgccgga agtctcagga ggtcactcac ctggaacgct cgtacttcca acagtcgcac 180
tgagtcgatg tatcaagagt gtcttcaagt taccca 216

<210> 542
<211> 64
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A6

<400> 542

acgttctaaa aatgtacagt tgctgctcaa gaacaagaaa gcttcccttg aattttctct 60
ggac 64

<210> 543
<211> 304
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A7

<400> 543

gctttacatg gagacatcac gcaaaaactc acgtaattca cgctttccag atttacataa 60
ggcttagtcc aggtcttaat tgccactgat ctagaccac ggggtttggt tattatcgga 120
gtccatttag tgattcagta tcattatcct tacgacattg attcgtatat ccatcgcgct 180
ggtcgcactg gcagagcagg taccactggg acttgtattg ttttgtatac cggtaagac 240

caacttttgc ctgattttgt gctaaacggt ttgtccgata ccttttcggt tagaaagtcc 300
tcct 304

<210> 544
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-A9

<400> 544

cgagttgaga aatatcgaaa gtcggaaaac ggtgaagaag aagctcagaa agcaattggc 60
aagaataaga acttttttggc tcacgttgcc aacgaagcat gttcgcgtag ataaattgtc 120
ggcatccgtc aaacactagt gaagcgtata ccaatttttag taaatggaaa taacttgtgg 180
agagactcat cttgatgaaa acaacttgct ctccagatga aattaataga ggggtgttgta 240
tttcaaacac ttgagtcata taggaacggt tattcgtaaa acatatacga tgaatgtttt 300
ctagtcgtct tttatgttgt ggtagagtag tgtgatttgt actttcctat gaataggcca 360
attattgcct tgttctttct aagagtcggt ttaatgttgt gcata 405

<210> 545
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B1

<400> 545

caggactggt tggatcatgt catccagatt atcgatatcc tagaagtgta tcgtgatagt 60
gcgcttggtt tggttgatat ctatttgagt ggtgtagtc ataatatgca agaaagtaag 120
tccattattg tatagatacc ttactgtctt atgtagttat gaaaacgctg actattataa 180
gtaccatatt tattccacta acgtttatgg ctgggtgata cggaatgaat ttccctcgaa 240
tgccagaatt acattatgga tatggatata ctatcttttg gtacgattgt tgttgaagag 300
tttctcgtaac aagtatatac atgattgaga acggaacata agttgatggc acttgtcata 360
gttgggcttg aaatatttat ttt 383

<210> 546
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B10

<400> 546
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 cttcctgtcg aaaccttttt gtactagagt tgaagaacaa ggaaaactta tagtatccga 120
 aaccgaagat gatacccgat tagatcggtt cttgagacgc cgtataagta gattgcctca 180
 gtctttatta gaaaaatata tccgaagagg agttgtaaag atagatgggc aagtagtaaa 240
 gaaagctggg gaaagagttc gttcttcttc cgtggtgtat attcctagac aactagaaa 300
 cttggaggaa aacacagggg acgacaatgt ggagaatagt cgtctccctc aggggggatgg 360
 cgctatgatg atggacagaa agaaaactac cttgtctacc caagtaacaa at 412

<210> 547
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B11

<400> 547
 gaacgcacgt ttaaataagg ctcagaatag acacagtact tcaaaaagt accgagtttt 60
 gttggatgcg ttttctttaa taagtcagtt cgcggaacgc tcttccctgt ctgagagagt 120
 agtggacaga gcacaggagt tggtcaaaat gtatttcgat caacttactt tgaaccctcg 180
 aggtggtaga actcgttatt tgaaagaaca cgaaactact gcagttgctg cagcatcgct 240
 tcagtgggcg gcgcatattg aaggagttcc taggagcttc aaggaaatga cgagtacgac 300
 gcaagtaccc aaaaagactc tttcagatac ttatctgaaa atgacacaaa gtctcaaact 360
 gaatcagctt aataagagta cggaagactt ta 392

<210> 548
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B12

<400> 548

ctttgatccc actaagtgga ccttgcgttt cttgagctgg tttggtttgg tgaagcgctt 60
agttcgcttt tcgaagaatg aggtgaagaa ggcgaggtta caagttgagc agcagaatct 120
tgaaaagcag atgaaacagt tggattgggg aaagcctctt gaaagtcttc cagagatgac 180
ctgggaagat attgaagcac aagtagagaa gggtttatat cttgttgta tcgatggact 240
ggatatataac gtgaccgatt ttcctccgaa ttcacctggt gggaaaaagg atattgaatt 300
tctggaaggt cccgatgcta gccgtgcctt taaggaagaa gtttaccgtc atagcaaggc 360
tgcaacgaat ttgatggcac attatcgta tgcaaagttg gttgagaa 408

<210> 549

<211> 355

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B2

<400> 549

cccacgcgtc cgggtgttcc aaagctggac tccatatgtt gaccaaaatg atggctttgg 60
aatgggggtcc ttataatatt caaaccaatg ccatcgctcc taaggtaatg tggaccgaaa 120
tgggacagcg cgtgtggggg gtcctgaga aacacgaacc tatgttggca cgtattccag 180
cccatcgttt tgtaaaaccg gaagaaattg cagaattgac cgtatttttg gctggaccag 240
gctcggatat gatttggtga cagactattg ccgtggatgg aggattaact gtgcattgac 300
tgaggataga ctggagcaat aataataaag aatatcagga aatgtttgta tggat 355

<210> 550

<211> 309

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B4

<400> 550

acccgtccga agtcgcatgg gggttgttgt gggtgcgaaa tgggtgtacag tcgtttgtcc 60
ttgtcgtgtc acgctcgatt tactttgcag tgtatcatgg cttctagatc ttggaacata 120
gtttaggtgt acgactagtg taacctttag caggaagggt tttgtacatg ttagccctct 180

tttcatacat atgaacattc tcgaagagtg taagcagaga cccagttgta aagactgttg 240
 cgtcttcaca taacggacca aagttcgttg atcttagatt ctccaagttt tcacggggcg 300
 aacgagttt 309

<210> 551
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-B7
 <400> 551

gtccacatt ccgcgtccac ccacgcgtcc gaccacgcgt ccgcaagcat tcaagcacct 60
 cttgaatgga tatcatttct atggacaagg tataagaact aaagtcactg gacaattccg 120
 tggaacaaga ctgcaataaa ttttttgaga atggaaacaa gtcacctgga cttagagcaa 180
 gagagaactt gcacgacatc atacaacttg ctcaagaact acgcatagag atataagcga 240
 cgaaacaaac tgaaaagtga tacttttcaac tgtgcagaat caaccatggc ttgtgaaact 300
 attccagttt ttgaaataaa aacctttttt cttttgtaac ccaagaaaaa caaactttta 360

<210> 552
 <211> 94
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-B8
 <400> 552

gaaagaggca aatacgggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc 60
 aagaagaaaa gaaggaataa attaagaaag aaag 94

<210> 553
 <211> 381
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-C11
 <400> 553

cggacgcgtg ggggttttttg agatcacaca aacacttgta cactgaatga acgacgtatg 60

ggtactaact gtgcattttg tatagatatc aaggatgtca aatatgttat caactacgat 120
 ttcccgaata ctatagaaga ctatgttcat cgcattggtc gcaactggtcg tgctgggtgcc 180
 cttggaaagt cccatacgtt tttcactccg gataaattcc gtgttgcgaa agaattagtt 240
 aacttgttgc gagatgctgg acaggacatt cctcccgagt tggctcgttt gataaaaaact 300
 tcgtcctttg gcggttaacaa cagaaacttt tctcgttatc caagttacaa ttctcggggc 360
 ggctcatttt caaataatgg a 381

<210> 554
 <211> 105
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C3

<400> 554

gatgtatgat gcaggcaaag aagtgacgca gtagatcaga gagtaacaca tgcaagtagg 60
 taaagcgaac ggggtgagtaa agaggtgtga aagattggaa gacca 105

<210> 555
 <211> 175
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C8

<400> 555

cgaaaaatga tctcttccag aacatcaacg tttgctatct gctgtaaagc aactagaaga 60
 tggtcgtact ctttcagact attatattca caaggagtct acgcttcacg tggaagtgcg 120
 tctgaggtgt agttgcaaaa tatttcagcc tctagtttac tttaccctt atttt 175

<210> 556
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C9

<400> 556

gcaggatatg ttacaaaatg ttccggtgaa ggtatttact ttgcagcgaa atcgggacgt 60

atgtgtgcag aagctattgc ggagatttct ttacaaggag aaagaattcc ttccgaatcc 120
gaactgaagg cgacttatct gaagagatgg gatagcatgt attggtcgac ttacaaagta 180
ttggatgtat tacaagcagt attttatcgc aataatattg ctcggaagc atttgtggaa 240
ctttgtgaag atgaatatgt gcaaaagatg acttttgatt cctacctcta caagacagtt 300
gccacaggaa atcctttgca agacgtaaca ctagtgtttc atacattggg agcttttgca 360
agagcaccgc ctttggcacc ttgaaaataa aaaagtgtgt ccttggtg 408

<210> 557
<211> 418
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-D11
<400> 557

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ggtctaggaa acaagagagc tttatgtttg caaagtaaaa ataatagaac aagtttaaaa 120
aggccaatth cgtcttctag tcaacttttg cgaatgactg gagctacttc ctctgcttcc 180
gatgacagtg ttccagatat gggaaagaga atgttcttaa actatgtctt gcttggtggt 240
gcttccattc caatcttctc tatgttgggt gggtatgcat actttttcta tccaccctct 300
cgtggtggtt cgggtacagg tactgttgcg agagacgtgt tcggacgaga aataaagaaa 360
aaggaattht tggaacgag gaaaccaggc acgcatgagt tggtaacagg acctaaag 418

<210> 558
<211> 193
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-D3
<400> 558

gagccaagaa actatggacg cagaagaact gcagcaaaga aaaagcttga ataagacaaa 60
cgcacagagg cctggagccg ctgccgcgcc ctctagctga atgtgatggc accaagtgga 120
gaacaagtaa tatgttgtgt tgactgtata ttctttcgct ctgataaatt gtcaacacgt 180
gttatttgtc cgc 193

<210> 559
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-D4

<400> 559

agtagatgag gaaagaaaga tcaaggaagt aagagtaaga gaaggagtaa tgtgaatgaa 60
 nagcaggaaa gtatttgaaa aaaaaattgt aaagcgcgta cctttttgca aaaatgtccc 120
 agccgagtga aagaggaagc aaaaagaana gaaaaaaaaag tagccacggt aagacccaaa 180
 gccagttgat cttaggccgt ccaaaccaag taagggtgaa ccagtaactg tggaaaaaga 240
 tttggaagaa atgggataaa gggtgaaaag ccaatcaaag ctagtgataa ctggtactcc 300
 tcgaaaagct atataagtag cgtatgcaag gaaagaagaa ggtaaaggaa gagaaggaag 360
 aaacaaagag ggactatg 378

<210> 560
 <211> 71
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D6

<400> 560

accacgaca tccgcaggac gctgtggggtc aaccggcgga tctctgcacc ggtcccatgc 60
 tatgtgtacc a 71

<210> 561
 <211> 373
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D8

<400> 561

caacaataaa caaaatcccc caatttcct tccaataatt tgaatttgcc aaaaatccat 60
 ttgcaggacc tctcaagaac cccaaaaaac cttcaacggt aaaaggatac agcattcact 120

atactcaaac ctacactacc gattataccc caagctatag tagtgaataa acccctagct 180
 ataccagctc caatagtcaa gtttattctt ccccttacca atcctcatac agtcctacct 240
 atacaactta tccatggatt caaccttggtg ctcaagcttg tgcgggatgc cttaattgca 300
 atcaacagta caatttcaac tatccctatg gtcttgataa cctccactgc aacaactttg 360
 acaaatactg ccc 373

<210> 562
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-E10
 <400> 562

gacgaggata cccgctgaac ttaagcataa caataaacgg ggggaaagaa accaactggg 60
 aatcccccaa taacggggaa cgaagccgga aaaaccaaac aagagaaacc cccttttttt 120
 aacgggaaaa aaagagaagt atttgaaaaa agaacagaaa tatctgcagc aagaaaagaa 180
 caaatttctt ggaatggaat aacatggagg gtgagaatcc cgtttatccc ttttctttaa 240
 attcaagctg cgttacgata tttcttggtg tggagtcggg ttgtttggta gtacagcctt 300
 aattttgtgg gtgttataaa tcatccaagg ctaaatacgt aaaccgagaa ccttacctct 360
 ccaagaaggt gttgcacggc tgctg 385

<210> 563
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-E11
 <400> 563

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 tttaagggat ccttttgtcc ttatcaactt gagacactat tgcattgctt gcgatggggc 120
 ttactcggaa agtgttaccg atatttgctc caaacgccca ctgatggaaa gtgacattgt 180
 tcagtttcaa cttgtatcca aacaagaaca accagcttat tatttagcag tagatcattt 240
 gacgagaaac attgtattgt ctatttggtg aacgaagagc ttccaagatg ttcttaccga 300

cgттаатгта gagacgacag aatttttgggа сggttatgca ccaaagggaa tggtagcttc 360
 tgtatattgg ttacaaaatc aagttttgca таасatct 398

<210> 564
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-E12
 <400> 564

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 agcatcttgt cctttttata ctсgggcgaa caaccgagag tggactatat cgttgctgag 120
 gatgaagcaa gttgggaaaa gttgtggaga ggaaaacgcg aggtcattgg atatactttg 180
 gaagcagctt tacagaaaac ttgtattgtg gaaaaccagt tgagggagtg gaaaaagaaa 240
 ctсgatagtc tagcagacaa ttattcgttg ggtacgagag cctatgatgc gagaatgtgg 300
 tcattggacc tcatcgcaac tattatgagt gtctgttttg cagtttttgg aatgttttca 360
 caattctttg gttattatgt tcaattgccc atttacaata tgggaaatg 409

<210> 565
 <211> 427
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-E2
 <400> 565

gcacaacatt gggtttgtct ctgtgctcca таатgaacaa ggcatttgt cggaatccag 60
 tagttgtgga aaactacctt ttctgtttgg aaaatttcaa cttggtactt gtgaggaacc 120
 aanaaacaat gatacatatt tcgagagttt attagagaat aatgcaacgc catttgaccg 180
 catggatgtc ttagacattg таатgttttg tagcttgagt ggtgctatta taggattgca 240
 gctttattgt ttgtcgcact ctgtcgatct tccctttcgt tttgttgcaс ttggatgggt 300
 ttttggcgta ngaggctcaa tagtatatcc ttatagtgga aaattatggc agtatctgca 360
 tcgaacttct tggcttcgag cactgttctc agaacaagca acattttcat agaaacagag 420
 gaagaat 427

<210> 566
 <211> 317
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-011-Q1-E1-E3

 <400> 566

gaaggagact ttgaaggaaa gcttcataca gatattgagc ttttggaaga taacacaatg 60
 aggagtttgg ttcagcaata tgccaatgac caacagcaat tctttaatga cttttctgag 120
 gtgtttggaa aatatatttc tagaattcat tgcaatcaaa cttccacagg accttgccg 180
 ttggatgaca tcggtgtacc aacgtctgct gctccatcac cgcagtcggc tgttccttca 240
 ttttcggaac ctagtctcg ggcccccttc tgggactagt tttccaaact tttgatgggtg 300
 agccctcagc tcaatca 317

<210> 567
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-011-Q1-E1-E7

 <400> 567

agaagatgaa ctgttgcaga agggaaagaa cttgttgctg gaagttattc gtgttcctta 60
 catcagaaga gctcttttga taggaatcat ggaaatgctg ttccaacaaa tgagtggcat 120
 gaatgtgttt atgaattata ttgatgaagt ctttcaggag aacatcaata tggggccaag 180
 aacttccgta gctataagtt tgttcccagg tttcgtgaat atggctgcta cggtcattgt 240
 atactttacc atcgatcgat atggaaggag aacattgcaa ttggttactt tccttgaat 300
 gtttctcatg ttattgatgg ttctgttttc cttttacgga gataagaaag tgaatttagc 360
 cttctttatt atcggagtta tattctttat tattgcctat agtcctgggtg ctggctctg 419

<210> 568
 <211> 387
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-011-Q1-E1-E9

<400> 568

acaagactct aaagtgagtc gtagtaatga agacccatgg tccggactag gcatcagagc 60
cttgtactgt tcaacaacac tggcaaata gtaacagaga ttgcaaactc atagtatttg 120
gcgcgagtc cggtcacagt cagtgaatct catgctgtgc atttgcaaca tccagttggt 180
ggtaaaggca gaaagagcga ttataggaaa tattagctgt ccaaaaagta tcgaattgtg 240
tcctcgatta gctggacata atagcacttt ggttccatga acatttggat gactttcggt 300
tggaagctat cttgggagca ctattgtgta cgtgttagtg tgaattgaaa cgttttgaag 360
gacaattggg ggtacaagaa tggaatg 387

<210> 569

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-011-Q1-E1-F11

<400> 569

ctctggccgt ctacagattt tttctgacat actattggaa aaggatttca cgtattagag 60
catagtgaat ttttggactg tacagttttc agttattcaa caagcaacag actacgagtt 120
tgtcgttctt gtggcacgaa aaagcctcta cgatataatc acgtattcat cgtgagcaca 180
gaaactaact aacgcagttg agaatgtctt atttttgggc tacagtagaa gccggcttcg 240
gaccgagctt cgaagagcaa gactgtgatt acaatcaaaa gaacacaagg ttcaactttc 300
gagctcaaat gcttactttt accaaccagt cgcccaagat ttatgtntgt tgccgaagcg 360
gcgaaagtgc ttgttctctg tctactgtnt gctttggtgt gaccaacatg 410

<210> 570

<211> 173

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F12

<400> 570

gtgtagaaaa ggcgatcctt gaacgtaaca aacagagttt tgccaataaa tcaactcacg 60

agataccaaa agccataatt tttgggcaac aaactgcaag aagagcagaa atgcacaaaac 120
 aaaaggaact tcaaagccaa gaagaaatcg aactggtgag aatccaatgt taa 173

<210> 571
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-F2

<400> 571

ccgccctttt tcttttggga ttgcgatga gtccccaaag caagcgcac tcgtgttttc 60
 tgtccgtcca acctttgtgt tcaacacttt gtcattgtgg tanagttgtt cctcggtcgt 120
 ccagaaactc aaacgatgct ccttgtgggt cctcttttca tttatgtcgt ggagtgaana 180
 ggactctaca ccccaaagct ttgcaaccat tgagtggtag aaacagattt tcctccagct 240
 tctcagaaaa caattcgtct tggagaagga acaaaaatct tctaaaggca gcagtgcggt 300
 aaatagagtc ccaagaacaa ctagatcaag aactggaaaa ggcgggattc aaactaacga 360
 tcgtggactt ttcgactaca tgggtgtggc catgcaaagt tgttgccca aaatatgaag 420

<210> 572
 <211> 240
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F3

<400> 572

tccaccacg cgtccgattc acctagtcaa agcaccocat tgttgactc ctacgagttg 60
 gaaccaacac gacgacgac gtaccaactc atacaagact tggataaaca cccgtcgtga 120
 agctcaggtc acgccatcga ccgcataaac agaagtactt gcacacgtcg cattggatgg 180
 tcatcgcaaa gcagagatga ataccggaat cacgttctta gaccaaattgt tgtgtcaaat 240

<210> 573
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-011-Q1-E1-F4

<400> 573

gagcaaacat ggaatgacag atattattga ttgatgaaaa ttcctccgtn tttccctaag 60
ttaagggaaa gaaaatccaa cctccgttcc caaaagccaa tccctttgga gaagcaaatt 120
tgctcttag aaaaatactc gagtctttga ttcattccct gaagcataaa tagtcgtata 180
tcgttatcat cgcacncgt aacgataatt tgttcacgt tggatcataga aaagtctaatt 240
atggtatctg aatgtccatg aaatgttttt acacaactat tatttggtgc tgttcttata 300
tcccataaac aaagtgtatt atctgcagaa gcggataaga caagaaaaaa aaaaaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420
aaaaaaaaaa aaaaaagggg ggccc 445

<210> 574

<211> 101

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F5

<400> 574

cccacgagtc cgaacaagt cgaaggagta tggaaacagg acggccgctc gagtcgttcc 60
aaggtaacgt agtcgtgcaa gcgacgtcat aactcttcaa c 101

<210> 575

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F6

<400> 575

gtgcgttggt agaggatagt gaaattagac agcttcccaa catagaactt catctgaaga 60
atgatgtgga gttgggtttg gagccagaag actacatggt aaaagttgaa agtccaaacg 120
tcctcaccgg tgaaatggaa atttatcgtt gtttaggcat tcattatatg caacatttgg 180
aacgaatggg aaatgatatg attttgggag gaactctttt gcagcgttat tacactgttt 240
acgatagaga gcaaatgcgc ctaggatttg caaaagccaa aagatgggtc gacgtgaagt 300

cattattgga tgaacaagg caaccgaaa tggaaaatga tactaatgta gcaactccgc 360
agccatcccc agcaacatct aacaacacgt ccaaccacg tactaatgaa gaacaa 416

<210> 576
<211> 358
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F7

<400> 576

ctgcggtgaa cctttcaact agtcttcttg taatttgctg ccatgggtct ttccaactcc 60
aagttattaa cccgtttatt tgggaaaaaa gaaatgagaa tccctatggt aaggcttgat 120
gccgcgggaa aaactaccat attatacaaa ctcaaactgg gtgaaatcct cacgaaaatt 180
tccaacaatg gggtcaaact ggaaaacctt taaaacaaaa atatccattt taaaggggtg 240
gaactccgtg gtcaaaacaa gatacgaact ttgttgcgcc acaaatttcc aaacaaccca 300
gggtacaacc tcctaattga caattaccaa aaaaaacctt ttccccaac aacggaag 358

<210> 577
<211> 280
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F8

<400> 577

caacagcaat gtgtaaagta tgtgggtcaa caagttatcg cacccaaaca atgtgtcaag 60
tactataccg agcagaagat tcaacaaaag tattgctctc ggcaagttac tgaagaagaa 120
gtacaaaagca agcagtgcac caagtatgta tctcttcaga agatcaagta cgagtcttgc 180
tctgtcaat atgaagttca aaagaataag cagcaacaat gtactatgac agtctctgaa 240
caatacatat agcccgatac ttgctaaaag tatgttctctg 280

<210> 578
<211> 286
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G1

<400> 578

cacacgcgtc cgcccacgcg tccgcgagcg cgtgggcgga cgcgtgggat aaaatggcca 60
aagtaaacc tgtgtcgtcg gctcctaaac taagtgtaac tagagagata gctatcggta 120
ttgggcttgg tatagcgtgt gctatggat ttcgccagtg gcctctcgga tacacggaaa 180
tgataagaaa atattatcgc gagttggatg aacaagaaca gagttcctcg tcgtcgtgaa 240
aaccgccttg tgtttgtgag atagcaataa agtggactct tgtttc 286

<210> 579

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G12

<400> 579

gtggaatgtg ttggaggaga acaaactctt tggtttgtgg atgccttttg attctctcaa 60
caacaggttt ttgccattgg aaggaataga aaccaaggca gtattgatat gtgatgacga 120
catgtttgtt catcacgaag acattgctta tgcatttcag atttggaatc attctcgaga 180
ctcgtttggt ggtttctttc ctgcagcaca taaaaaatg gaagacaatg aatatgaata 240
cttgacacat attcctatgg acggtggaca cagcagatat tctattatgc tctactaaat 300
agagtttatg aagagtgaat atttattttg gtattcctgt gcattcgata ggagagtttt 360
acagtggatt cgtgaacaca agaactgcc aagacattg 398

<210> 580

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G2

<400> 580

gtccgcacca cgcacccgct tctaccagaa cagcagtatg tgaaaaacag agggaaacca 60
agaagaagag ttgcaagga atcaacggaa gagaaacatc cgacgagaca caagttgaat 120
catgcaaac cagagataa ggagattttg gaagaagagg aaatcttcaa ttactagaa 180
gcttttagaa agtattttcc agaaccaccg agcaacttga gagctcagga aataattgaa 240

agtaggtctg gtaggttctt tacggagaaa gaacagtggg agctgtggga aaacgttttg 300
aagccttgga gtcaaaaatg gtactcagaa aaggaagctt tcttccgtaa tgctagagcg 360
aggtttttaa acactccaag tagccaattc attactaaag aactggcaga ggaatgggcc 420
aagtccttcg ttcaagtaag ggag 444

<210> 581
<211> 401
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-G3
<400> 581

caacttgggc actatgattt tgttgttctc ttcaaagtca aggagttttt agtaaacata 60
ttcgttccct tagctttaca attcatggac acctgttgcc acagttcttt gtctgcaact 120
ctcttgaggg gtttccccga gtcgttacca ccaaagtttt tgggtggagca cctcgaccag 180
ttgcttggtg tggacctgcg ttgctctcaa ctgtacagtt tgggacacat tagaggttct 240
tacagtctcc cggtgaagaa gaagaagctt ctgaatagtg aggttgctga ctcgatatgc 300
cacaagtggg tacgaaaact ttccaaattc gtggatgaag aacggttgaa aaagaattgc 360
gtatttcacg tggttcttta tgatcattct tcgacagaga c 401

<210> 582
<211> 383
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-G4
<400> 582

tcgaccggac ccgtccgcag acgcatgggc ggacgcgtgg gcggacgcgt ggggtggggg 60
aaagtatgga tcctgggcta aaagcggtgc aacttcaccg ccaacgaaga aagcgactgg 120
aagagaactc agttgatcaa gaagcaactt tgggggatag aaactacgaa gacgaggata 180
aaaagacttc aagtcaccgt tacgggacca caattgaacg accttcggtg tatgaagaaa 240
cgggaccgtt tgctttcgaa aaaaggagtt atgtgaagaa aagaaagaaa tacaagatt 300
tttatgatcg tcaaacattc aaatcacaag ggaacgggtc cacttccagg gaaaacggaa 360

aaagcgttgt agaaagttcc tac

383

<210> 583
<211> 77
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G5

<400> 583

cacgagtccg aacacgcgtc cggacgaatt ccacatcgcg atcagggaca cgcaatcaag 60

tagaaccgta ccctgat 77

<210> 584
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G6

<400> 584

cttgttgatt cattacgaac acaagaattg aagaattgaa gcgactagtc gggttggaaa 60

tacaataata tgcagtggca acccactgta gcctatgcag ggagccgctt ggaacaaccc 120

cacgtgaata ggagtatggt gcaaactcct gcgactttat tcggagattc gcagtatcct 180

ttgaggcgctt cacagagtgg tagtaagcta aaagtcacg aagaactaag ttcgcaaata 240

aaaaacctgc aaactgagtt ggaaagagct tacgaagaaa ttgaccgctt gaagagtagt 300

tgggaagggat cgaagggtcg tgagttcgtg aaaggctcaa caggagaaga accagttgct 360

tcttccattc ggcaatacca gaacgtttct gaccaagata ttggcaagag gagcaaagga 420

aacc 424

<210> 585
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G8

<400> 585

aggacgcgtg ggcggacgcg tgggcagaaa caaacggtca tattgaatga cgaaacagtg 60

gagcagttgt gtagacaagc cttgtgtcat gcagcagctg gtgcggatgt cgttgcacct 120
 tccgatatga tggatggtag agttggagcc attcgtcggg ccttggatgc gcatggatac 180
 agttatgtga gtatttggtc atatactgca aagtatgctt catcatttta tggtcctttc 240
 cgagatgcac tggaaatctgc tccagcagat atgccatgaa ttacaaaaga ataaaagacg 300
 tacaaatgga tectggatat gcctgggacg cttgcagaga aatggaattg gatgaacata 360
 aacgtccgga tatgtcatg gtcaagccgg gattgcctta tttggata 408

<210> 586
 <211> 240
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H1

<400> 586

acactatgtc cgacaaaaca atatggagac taagaataag aaaactatca cagtgataga 60
 taaccagact ggacaagagt taacgcttga ggtgaacaat aacactattc gtgcagttga 120
 tttggctaaa cttggagtca ctgtatatga ccctgggttt ttaaactctg cttcttgtat 180
 ttcaagaatt acttatattg atggagacaa aggcattctt cgttacagag gctatccgat 240

<210> 587
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H10

<400> 587

cccacgcgtc cgcccacgcg tccgggaagc tatcttggga gcactattgt gtacttggtta 60
 ttgtgagtgg aagcgttttg aaggagaatt ggggtgacaa gaatggaatg aattggagaa 120
 gatatcttcc ttagatactt ggaagcttgt gcttgggtaca agacaaagag tggataatat 180
 gttacagcga gtacacaagc tgacgagcat cttgtccttt ttatactcgg gcgaacaacc 240
 gagagtggac tatatcgttg ctgaggatga agcaagttgg gaaaagttgt ggagaggaaa 300
 acgcgaggtc attggatata ctttgggaagc agctttacag aaaacttgta ttgtggaaaa 360
 ccagttgagg gagtggaaaa agaaactcga tagtctagca gacaatta 408

<210> 588
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H12

<400> 588

gacattgcgc gatttgaatt tccttggaga tgtatggaga ccaggcaaca gctctcgttc 60
 atcatctgta taagagttca tcgttgcttc cttacaaaga agatgcagtt cgtcaagtag 120
 tgcaagaaat agaccaactc tatgcccaat tagtacaact tttagaaaca gccaacaacg 180
 accttagtga cccaaggata ggaggaacag ctatattctt tcatcgagtc attcttcgta 240
 ataagcgatg tgttcttgca tacttacttc ataggtttta tcgtttgcgc gatagtagat 300
 atctcgtaat ggatgaccga atagaagaaa atttaagtgc ttctgaacaa gaattgttga 360
 caaactatga acaacttgta gccagctaca gtgataaggt gcaaatagac attt 414

<210> 589
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H2

<400> 589

tccaccgacc cgtccgaact cttcaaattg tttggaagct acatcaagtg cgcgagagga 60
 caatttggct tttgaaaagt tcacttcaag tcctatgttc tccaatgttt cactcactt 120
 cacagagtca caaagggttg ttgcatectc gcaagctgca gagagtattt cagaagactc 180
 tagtgactcc gagtgtgaat atgattttat tctgaagaaa gacagccact ccaaaaacga 240
 aacgactgaa agagaaatgg gagaaccaac aacacatttt ataaataata atgaatcttg 300
 aaaatacaca aaagtagaca ctagtcagag agtgcagtat acttaagaat tttcagagac 360
 catggactct gtctcggcaa gaaacatgtc tttagctatg taatcgattc ttctgatggg 420
 ttcttagtct tcaaacagaa accaaagaat aa 452

<210> 590
 <211> 429
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H3

<400> 590

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tttctctctt tccttatcgc tgccgcagtt gcagccgacg tagtttcaga ggagagatgg 120
ggatatgctc agcaaaccce acaacagcaa cagtgccaac aagtatgtaa acagtatgca 180
tactatcaga gtccagtctg cacttccgta accacacaga gcccatactg gacccaatgc 240
tcgaagactg tgcaaacctt tgtcccaagc cagtgcagta cttataccca atctcctaca 300
tggaacctatt gcagcaccta caccaccact agcgtaacat ctcaatgcag caaggccgtg 360
actacctata ctcaaacctg ctgtgcttat gcccaacaaa cttcctatgc agtcagtacc 420
gagcaatat 429

<210> 591

<211> 407

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H5

<400> 591

caactgagta aatggattgg taccagtcgt cccaatgttt tgactgccta tagtttcttg 60
tcggttcttg atatttatgc tatttacaaa gaattgagag ctgttcagtt ccgaactttg 120
aattatgaac gttcaagtat gattgtggat tattttgttc gaagaggata cgttcctaga 180
cctgatgaag tcagccaaag ggagaatata tttcttgcac ctcgttatga cgttcgttct 240
atgtttgctt ctttgcgga cgcagtttct tgctctcaag aattgaatag tttggtcagg 300
actttcaaag gagagcagtt tatggtgact cgaacttggg acggtcagta tcgaatcgta 360
ctacgagaac atgctcgcaa tagtgatatt ttacgagcat tattgac 407

<210> 592

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-011-Q1-E1-H6

<400> 592

cggacgcgtg ggtctgcggt agaacatatg aaagaagcag caccgactgt ttagcaaaaa 60
cacagcactc tgcagaaaag agaaaatgta aagtatagag tgtgcggcct gccaaatagt 120
agagaagaaa tcgatgaaag tgaaagcgag taaaagatga ggtatagaga atggcggtcc 180
taactgtaag gatccaaagg tancgaagta aatagacggt tgaaaggcgt ccagtatgaa 240
aggagaaacg agtgtagcac tgtctagtcg tccaactcag cgaaacagca ataactgtga 300
aaatgcagta aactagcagt aggacggaaa gacnccataa ttcttgacta gataggttta 360
gggaggagag agaatcatga agtanaggag gtggggtaag agatgaaaga ccaactgca 418

<210> 593

<211> 304

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H7

<400> 593

cccacgcgtc cgatttcaga tgcttttctt gtttgtcttg ccctttgttt gtttcaaact 60
tttctttctt gtgattgtgc caacgtgttt ttttgtggcg ccttgctttc ccgacatttc 120
agctgccata agatctcacc tgtcgggtcc tctaagaaag acaaagaaac tatgcaagtc 180
aggtaaaagc cctctcgttt catggttctc aaacacttct ccgaatactt ttgagttgga 240
agatgaagat tctggtgaag aagaacaagg agttgtttac aaattggaaa agaactcggt 300
aaag 304

<210> 594

<211> 338

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-H9

<400> 594

ggaatgggat cgatgtattg tttttcaciaa cttgtagaag ctttttggtt gatagttcca 60
ttttttatac gaggaccaac ttcaggacat tctccttctt tgatattgaa attgggtact 120
ttgagtattc tcgcattggt tgggtatacct tgggtctagta caatgactat accttgggag 180

ttgatgggta ctgctgtgta tcgagtggat cctaatacgaa taggattata ttccaccttt 240
 ttcaatctaa gtcagtcagg acctcaattg ttggtatctt tgggttctcc aagaatcgta 300
 cgaaagacgg gggatgttaa tgtgggttta ttgttggg 338

<210> 595
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-A10
 <400> 595

atthttgcaca aaatattcga cgtcgccatt gagcagccgt gatgggacgt gtaatacagag 60
 gccagagaaa gggagccggt agtgtatttc gtgcgcatgt cgtcaaaaga aaaggagcag 120
 ccaagtttag agcgttggat tatgccgaaa gacacggata tctaagagga gtcgtcaggg 180
 aaatcataca cgaccagga agaggagctc ctttggctcg agtgggaattt agggatccgt 240
 atagatataa gagaagagta gagactttta ttgcaccaga aggtttatat acgggacaat 300
 tcgtgtattg tggaaagaaa gcccaactag caatcggtaa cgtccttcca cttggttcct 360
 tacctgaagg aacagtcgtt tgtaacgtcg aaggtaaaat tggcgataga ggaaaaat 418

<210> 596
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-A12
 <400> 596

agattggttc cttgggtgca gctgccattc ggctgagcat gataacggac ctttttattg 60
 taaaatgagc tactgattca gaacaagatg ctgtcgtttg ccatttttca agtgagagtt 120
 gcatttattt gccatgtttt attgtttgat ataggaaaat ccaagttgta tcttcagtcg 180
 gcgccagaat agtgacaatg gtagaaccgc tactaccagt tcccttttta gctattcaag 240
 tggctttgcc atacccttta gggcgctggc tcgtggtggg agcgtcgcta aagtaggagc 300
 taaggcgacg taggctttcg gcgatggaca tacgaacgcc catcactcct ctgaaaaccg 360
 acctgccaga ataaatcctt ataaccagc ccagtaccag cactgcgaag attcactgtc 420

aaaccc

426

<210> 597
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-A2

<400> 597

aggaaatagt acaactagta gggaaggact cgctggcaga aaacgataag attacgctgg 60
aagttgcaaa aatgatacgt gaagactttc ttgcgcaaaa ttcgtttact gaatacgacc 120
gattctgtcc attttacaag agcgttctca tgttgcgcaa tatgattcat ttttatgagt 180
tggcaaataa ggcagttgaa ggatccggtg agcaacatct aacattggcg cagataaagg 240
aacaaatggg tgaaaccatc tacaagatat ctggtatgaa gtttttggat cctgcacaag 300
gtgaagatgc tttgagaagt aagctcgatg cactgtactc ggagataaca gacggctttt 360
acaaaatgga gaatagcctg tgacattaaa 390

<210> 598
<211> 389
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-A3

<400> 598

gggccacgcg tccacccacg cgtccggtct agtgggtgcc cctgcctgtg gagatgtcat 60
gaagttgcaa atacgagtag atgagacagg gaaatagtag aaagtaggtt caagacattt 120
ggttgtggtt cagctatagc ttcattctct tatgcaaccg agttgattcg aggaaaaacc 180
ttggaagaag cgagtaaaat taagaataag gaaattgcag aagagttgaa gctaccccca 240
gtgaaactac attgtagtat gttggcgga gatgctatta aagcagctgt caaagacttg 300
caaaagaaaa tgggtgcttc cagtgcctaa aagacgatgg aagtttctag tctttctctt 360
cctcctttgg tgtggagaag agttgtgtg 389

<210> 599
<211> 387

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-A4

 <400> 599

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 caagttactt ggagaaaaac gttttctacc gcaataccta ccaaaacgac aagtcgaggc 120
 acatttggtc tttcgcagca aggaaagcct accaatcgtg tattagatgt gcttcacgag 180
 gggtttgaac aagcaagtgt tcgagagttg acggtatatc ttcgagatga cttggacagg 240
 tggtcgctga agtgggtccaa gcgtcccagt gattagtaag tgagagaaag agagagcatt 300
 gagtataggg aaacttgaag aatatagttt tccaggttct atcatcgggtg gtcctgggtg 360
 aatattatct ttgggggtgtc ctggcgt 387

<210> 600
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-A6

 <400> 600

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 aagcaatcag aggcattcgt gggagcgttt tgaaggctca cgcttctatg aaaatattta 120
 tgtgacttga gctcattttg cttttcgagt tgctctagcg aaagcagctt ccggtcacgg 180
 tttttcgaga acgagttgtg agtttcataa gaatattcgt ttcgacgggg aaatatttgg 240
 ttcagagcta ctagtaagaa aagagtcact cggaggcaat tggctactaa tttagttttc 300
 aagaagcttc atggaggtat aaaaactttc cactgtaaag aaagtcataa attacttggt 360
 tgaaatttaa tatcgttatc tgaagctttc atgagctggc acaactgcag ctttcgt 417

<210> 601
 <211> 292
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-B1

 <400> 601

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gacgatgttc actccaagtc tagtagtatt cgtcgcaaac tttatgcggc atctcggaat 120
cggaaactta acaggagaaa gtccgttggt cgtcagtttg taaaggactt tatgaacagt 180
ccggtattcg aagaagggtt tcataagcaa tcgagtcatt cggaatatcg atggtttatt 240
cgatacaaac agtacatgac ggctcttcta agtaaactgg aaacattgca gg 292

<210> 602
<211> 421
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-B12
<400> 602

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acttagatac tattcgacca agtcaccaga tgaaatgatt tcattgaagg agtacgtcag 120
ccgaatgaaa gaagggtcaag actccatcta ttatattacg ggtgaaagca aacaagcgg 180
tgagaattcg cccttcttag aaaagcttcg acgcaaagga tatgaagttc tcttcatggt 240
ggagccgatt gatgagtact gcatccaaca actcaaggaa tacgatggaa agaagctgg 300
ttgcgctaca aaggaaggtc tgaaattgga cgaaacagag gaagagaaga aagagaagga 360
ggaacaaaag aagtctttcg aacagttgtg cactgttatt aaggaaattc ttggagacaa 420
a 421

<210> 603
<211> 360
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-B3
<400> 603

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taagggtgaaa gaatggacga taaggaacta ggcaaaagga tatggtatcg gcggtagaac 120
atatgaaaga accaccaccg attggttacc aaaaacacaa cactctgcaa aaaagagaaa 180
atgtaaatta tacagtgtgc ggcctcccaa atattagaga agaactcgat gaaagtgaac 240

cctagtaaaa tatgaggtat acagaatggc cgtcctaacg gtgatgatcc aagggtaccc 300
aagtaaatag actttttaaaa ggcctccatt attagcggac aaacgagtgt accactgtct 360

<210> 604
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B6

<400> 604

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atttcaacgt tggaaaagaa ttggcaacta tttcatctac tcgcaatact ctagtgcacc 120
gagtagttta tttcaagcag accctaggaa atataatata tattttacagc atcgagtgga 180
gaaacaccta gttgcccatt ctatggttgc aacatcccta cataatcctc gctgtcttac 240
aagttcttca tcagaacaac attggaacca agtacacaaa acaacaacaa caccaagtgt 300
ggataatcat cctagtgggtg aagaagaaaa gagtttggtg ctggttcctg gtcaagaaac 360
aaaagaagaa caaggagcca agcgacagag 390

<210> 605
<211> 68
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B8

<400> 605

aaaagaatgg aaagtaaaaa aaaaaaaaaa aaatgcaaaa agaagacaag accgaaagg 60
ttaataaa 68

<210> 606
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C1

<400> 606

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gatgaagttt atgaagagaa aagaacctga agaaagtaaa cctacgcaag agaatgcatt 120
 ttcttcaact tgcatttcta cccgtgagga aggaatagaa gctgtagtag ttgatgagac 180
 aaatgtaagc gttttgggtc ccgaactaaa cttttccagt tttcaaggaa gaagttcctt 240
 cttgaatttc aatcctcggc ttgaaagcat attgaatgag ttgagaaatg ttgttccaca 300
 aagtttgaat gcagatacgg aagaaccatc tctggaaggc aaacgacgct tccaaaataa 360
 cgaaatagta gagaaattga agaaaaagaa aagaaaagtg aag 403

<210> 607
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-C10
 <400> 607

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 cgaaacattg caccatcgca tttgctcgca tctccaatgg atgaagcgtc gtcgtcgttg 120
 gtaagccgct tatatgccac ctggttattt ctttcgaccg ttgtgcatg tacttttatg 180
 ctatcttccg agttttcctt gcctctagcc gtcgtcacct tggccaccta tgcgtcgcg 240
 tgggtgcact ttgcggtgga aatatttatt taccacacgg tgccgttgaa acctggtgg 300
 caagcacctt tgttggttgc ctcggtgtcg ataggttgga tgctgtggta tttgatggcg 360
 atgcggagta caaggaaagc agaatatagg aagaaagcca agacgaaaga aaggtccgcg 420
 ca 422

<210> 608
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-012-Q1-E1-C11
 <400> 608

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gagtgtgtg gttaagttta ttaccaggag tgctcgttgg atgtttcatt ataggcttta 180
 gtttccgagc tagcaacatc catgtcgaag aaggaattta catttggggg atcataacat 240
 attatatgtt ttgggggttct ggtatgggac cttatgcttg ggtactggga tcggaaatat 300
 atccaactta tattcgaagt gaaggaatgg cgctagttac ttggtggaca tacattggna 360
 actttantac gacttattgc ttttccaaga tgaaaagagc aatgactgct ccaggaattt 420
 tca 423

<210> 609
 <211> 271
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C2

<400> 609

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 gattgatgtt attggccttt ttgatcaacg tattgtgctc cttgtagtct acagcgaacg 120
 gtttttcatt tgcagaagga atattgtact tggctacat tagacgagca agttcaccta 180
 tagtacagag ttccgggtct ctgtgtcgaa taacatgaat aaagtctctt ctatcaaagc 240
 tgtttgtctt tgatagattg gactctattt t 271

<210> 610
 <211> 377
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C3

<400> 610

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 acgttatagt tgcacaagtg gatgcagaca agcactccaa cttggcaaaa cgttttggtg 120
 tacaaggttt tccaaccata aagtggttcc ataagaaggt agacaaagca agtgcagagg 180
 atttttcggg ttccagaaca gcggaagcgc ttgcggactt tattcatcaa aagctggggc 240
 gtaccaacgt catccgtttg cctaaagcag aagctcacgt ggtggagctg aatccggaaa 300
 actttgacaa gattgttttg gaccctggaa agaacgtttt agtagagttt tatgcaccct 360

ggtgtggtca ttgcaaa

377

<210> 611
<211> 113
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D1

<400> 611

cggtcggccc acgcgtccac aaatattctt cagtaaactt ctggaactat cttggaagcc 60
ttgtcttgag caaaaaaaaa aaaaaaaaaa agaaaaaaaa aacaagggca gac 113

<210> 612
<211> 428
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D10

<400> 612

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tacatacagg aagaacatgc ccaagcggat aagcaacgta gagaactcat cgaagcaaag 120
aacaatgcgg atagtttggt gtattccaca gaaaagacgt tgaacgagca tcgttcaaag 180
ttgtcttcgg cggaatcac ccaagtagaa acagctatca acaatttgag aaacagtagc 240
caaggtgaga acttggaga aatcaagcgc catttagaag aacttcaaca agcagcgatg 300
aagattggtg aggctatgta tcgttcttcc tcgtctagtg gtagtggaag cggtacgagt 360
agcagcaaca caagcaacag cgagggaaca agcggcagca gcagcagcaa tacttccagt 420
acaatggg 428

<210> 613
<211> 241
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D12

<400> 613

attacttctc tttcaaaatc cagtcacagg acttggcctt gcaagtattt ggatcgtatt 60

gttgggttct cttagttatt ctatagtacg tcgtagagag atgatacaaa aggcagtcca 120
 agaacgttta ccagagaaag tatgaagttg cgtatatttat ttttaggaga cactggagtt 180
 ggtaaaactg taaggtgaaa gaagattggg atgtcttagt aaactcatag agttactagt 240
 c 241

<210> 614
 <211> 376
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-D2
 <400> 614

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 caaccttgaa tagcagtggg tcgaggttgc tatctacaca agcaacagga gctatagata 120
 tggaagttat tccaggtaaa acgaatattg gttggatcgg tacaggagtg atgggtgttc 180
 atatggccag gcattgtatg gacaagggat ttggaccctt ttatgtttat aataggacga 240
 tgcaaaaagc acagccgttg gtagaaaagg gagccacaac ttgcaactcg cctaaagaac 300
 ttgctcagca ttgtgacgtt gtatttacta tggttggata tcctcacgat gtccgtcaag 360
 taataactaga cgagac 376

<210> 615
 <211> 365
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-D3
 <400> 615

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 tgtcgtgttc atggaggagg aggagatgtg aaacggcgta gaaatcgat ccgtacgaat 120
 tcctttttat ctgcagtaga caagagctat gcgcattccc gtttttagtcc agcactttcc 180
 gtttaactct gaatttatct ctctttgtga atattctatt ctctgtttg tagaactgca 240
 aagtagaatt agtaataatt gttggtatac gttttcccag aaatgcgact agttgttttt 300
 gtgcgtgtgt gaatagtact gggtatatat atatatatat atatatatat atatataaa 360

at t t t t

365

<210> 616
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D4

<400> 616

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ctgtttggga agagatagat agtgctaaag tggacttttt actgtcagct ctaaggcggt 120
tgaatgaaga accagtttta cacaatggag tatggaccaa aaccaaacga aaagtcacgc 180
ttttttcaca gtttttggaa catat tttttt tgatttcgaa tattctggac agacatgggt 240
atcgatattg tcgtgtgttg ggagcattgt cttatcaagc aaagatgaat gcactccatc 300
gttttcgaaa cgatagttgc gttcagattt taattctcga ctctacaggt tctctagggc 360
atgatttgag ttttgtttca cacatattta taatgggaac cgttttggga 410

<210> 617
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D5

<400> 617

aagcgtcgac gtcgcatttg tagtagtatt gtggtgctct ttccaaccgg tttctccaac 60
gacgcaacac aaaaatgcct cgtgggtccaa gaaaacatat gaaacgtttg gcagcaccca 120
aacattggat gctcagcaaa cttggtggta tttgggcacc tagacctagc agtggaccgc 180
acaagttgcg agagtcacta cctctcttat tggttctccg caatcgactg aaatatgcgc 240
tcaataatag agaagcagtg gctat ttttga tgcagcgttt ggtaaaagtg gatggaaaag 300
tacgcaccga taaaactttt ccagcaggtt tcatggatgt gattgaattg gaacgaacca 360
atgaaacttt tcgtttattg ta 382

<210> 618
<211> 371
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D7

<400> 618

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gtttcgctct ggtaagcaac cgttgatggg tgctaccgac gtagctgcga gaggtttgga 120
tatcaaggat gtcaaataatg ttatcaacta cgatttcccg aatactatag aagactatgt 180
tcacgcgatt ggtcgcaactg gtcgtgctgg tgcccttgga aagtcccata cgtttttcac 240
tccggataaa ttccgtgttg cgaaagaatt agttaacttg ttgcgagatg ctggacagga 300
cattcctccc gagttggctc gtttgataaa aacttcgtcc tttggcgga acaacagaaa 360
cttttctcgt t 371
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<210> 619

<211> 214

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-D8

<400> 619

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acggttttgtg tggaaagttg tgattgtgta gagagtgtgt ttgtgagttg tgtgtggtat 120
tgttgtttta cgtctttgtg agtgaccact cgtaggagtg tgatgaatcc tcacaaagat 180
gatagaagac aataaaacga tgttgttttg gtat 214
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<210> 620

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E1

<400> 620

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attatctata tccacgatat ttccaccacc aagggtgacc atgttttctg tggcttcctt 120
tctcctagaa caaaacaaga acaacaacaa tcctagtga ccatcgctctt cgttgggtacc 180
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tactgccaag tttctggaag acatcgacaa agtcatagaa gaacaagggtg gaacgagcgc 240
 tgttttccaa gctttagaac aactatacac gcgttacaag atcctagatt ctagtctgac 300
 tcgacaaaag aagagttttc aagaaaaaat acccgacttg actaatgctt tgcaagtgat 360
 tcgttggtta caacaacg 378

<210> 621
 <211> 203
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-E12

<400> 621
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 gacgcagtag atcagagagt aacacatgca agtaggtaaa gcgaacgggt gagtaaagag 180
 gtgtgaaaga gtggaagaac atg 203

<210> 622
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-E3

<400> 622
 acaaatcaac ccgaccttc ttatacaagt taactgccat ccttgcaaaa agtcgtaa 60
 gttcattttg tacctaata tagaactatc tgaaaaagag aagcggatta cagatgcgcc 120
 ttttgggacg tgacgtagaa cgctgctgc tactggtagc attaacgctc ttgctttccg 180
 gtgccactta gctctaggtt ccttctcagt tgtaaatggt gtgcgttact aagatagata 240
 tactctctat tcgtccctga actatcttct cactcatgat gttcttgtca ggacagcttt 300
 tagggttgct tgtaaggat gcaagtactc gatgagaaaa ttgcaaatg tttttaaaga 360
 atgaaatttg ttgat 375

<210> 623
 <211> 177
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E4

<400> 623

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ctggaccaac ggaaaagtta caaggaccac caaaagtaga aaacaatatt tccaacatag 120
aatatgaact cgtgtaagac acttatcgta aaagaagcaa ccattgtttt tatatcg 177

<210> 624

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E6

<400> 624

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tttcgaatga tcccatttcg ggtaaagtga cacaaaggag atttatcatc gtggaaggaa 120
tatcaagcaa gtttgccgat gtgacacctt tggataaagt tgtggaattg aagaatcagt 180
atcgttttcg attgattgtg gacgaaagtt attcgttggg tgttctaggc aaaacaggtc 240
gtggagcttt agaacatttt ggattggaaa ccacagatgc agatattggt ttggcagatt 300
tgggaaatgc tattgcaact gtgggtggat tctgctgtag tagtgaagaa gtagccaatc 360
atcaacggtt atcgagtgtt ggttattggt tttccgcctc aaaagcttcc ttttttggca 420
aag 423

<210> 625

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E7

<400> 625

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tctgacgcta ctgtagcgtc tctatttagt gtgaaaatgt tgttctacct tacaatactt 120
gcgttctcta tcaactattgt gggctcttatg ggtaagagtt ccgacggtat ttgggttcac 180

agtggtccag cgaaagacga atattgtgca tacaagtctt cccttcaagt aaaccaccac 240
 ggcatagctt cctattgcaa gtatatcatg gctgtagcag ctattgggtt gggtatcagc 300
 ttcttcgagt ttggtatgc attcctcgga attttcttca agtggcaaca aaagttgtgg 360
 tatattgaat ctgctatcaa cgtgttttt 389

<210> 626
 <211> 384
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F1
 <400> 626

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 aacaggaaag cacaaaatgg agtagggaat ctattgcttc attatagact agaccagaat 120
 aattatatag gttatggccg agaggagtgc aaactggaat ctctttattg agacgaacaa 180
 ccatcgacta gctgttttga gaaaagaggc ctctcatgaa taggttgatc caacacacaa 240
 caaggatttt aatactaacc gacgtgttgc ataaataaga tgtcttctac gacgcgtcat 300
 tttgtaatat cactgtaaaa ttcatctcc tagtgctcct tgggtgttatt tgatatttaa 360
 ataagtagat tccttaaaga attt 384

<210> 627
 <211> 282
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F10
 <400> 627

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 tgctgtctat tggtagagtc ttccgcattt ttatctttct ttgtagcagc gctgaaaaca 120
 cactcgtttt catcaatcgt ctgctccaat aggctatcct tggttggtcaa atctctgata 180
 tataaagcat ccgcaaattg atcatccaac tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa aaaggaaaaa aaaaaaaaaa aa 282

<210> 628

<211> 398
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F12

<400> 628

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taagtaaata cgaggcgacc tgggtttttt ttccatccca cgttggtagc ttttgtatgt 120
acactcgttg gttgtattgc attgttggtg tttctattac aactggctat tgccaatccg 180
caatatcgta gttggaaaaa agagtggata gctatcgttg ttgcgtcgat aggtttggga 240
gaaggattgc tatttatggt gatatacagt ggacaaagtt tatgaactag ggttggtttt 300
ccctggtagt tgaggacagg tgaaatattt tcttggttgc ttgtctcact cgtcgagccc 360
cttgttgtaa taaattgccg ctagcctcca tttctttc 398
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<210> 629
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F2

<400> 629

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aagacaatga ggctctttat aacatttgtc acaatacttt gaaattgagt aatccctctt 60
atagcgacct caatcagttg gtaactgcag taatgtcggg aatcacttgt tctcttcggt 120
ttccaggaca actcaatgca gatttgcgta aattagctac caatctgatt ccattccctc 180
gtctacactt tttcatgatt ggattcgctc cttagctgc tcccggaacg cagcagtaca 240
agtcaagtag tattgtgac ttgtgtcaac aaatctttga ttctcgtaac atgatggcag 300
catgtgatcc tcgtcatggg cgttacctta ctgcagcagc ttatttccga ggaaagggtgc 360
caaccaacga aattgatgac caactaatga acgttcaaaa caag 404
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<210> 630
 <211> 363
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F3

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 aacctaagtg gagcagatctt ttcgggacag gaccttagtg gtgtcagttt tcaacagagt 120
 ctattaagag aaaccgactt tcatgggtcg aaattggttt cagcctcctt ctttgagca 180
 gagttatcct atgctaattt ggaagatgcg gatctttcag aagctaattt agagttggca 240
 aatcttcgta acgccaagct taagaatgct attttacgag gagcatactt ttcaggaaat 300
 acgcgttttag agaatgctga tatcgaaggt gctgattttt cccaagttat tcttagaaag 360
 gac 363

<210> 631
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F4

<400> 631
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 tgaaacacag tttggatatg tcacgagacc taatcatcga aacactactt gggaagctgc 120
 caagtttgaa gtttgtggac atcgcttttg cgatatttca gaacctgggt ttggcttggc 180
 tttgttgaat gatagtaa atcgatattc tgcaaaggga agcactttga ggcttacgtt 240
 attaaggtca ccaaagagcc cagataagga gtgcgacatt ggcgaccatg cattttctta 300
 cgcagtgttg cccacgttc ctgattttcc atgtgaacaa gtttttacgg ctgctcataa 360
 actgaacaga ga 372

<210> 632
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-F5

<400> 632
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tacatatgcc ctattgtaat tttatatcgc cttttgttgc caaggaaaca ttcagagctc 180
 agcacgcacc tggttcctct catttcgttt caaattgttg ctctataga ctgagaagca 240
 atcgatttgc ttcatttagt gacagcagag ttagaagact aggattgagt gtttacatgg 300
 gaaaggtttc cgactttggt cctttcactc ctattgtata cgtgacgcga tgggtccttg 360
 gcagggatag gtttaacagg ata 383

<210> 633
 <211> 331
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-G10
 <400> 633

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 catacttgtt acaagtatta ttctgtaccc aagtttattg aaaagtgcta tcctcagtat 120
 gcaacaacgg agaaatgtgt agagtatgag tatgttccat atgccacttc tacaccttat 180
 ccatcggtat ctccaagtta tactccttca gcatatcaaa caacttctgc ttattaaaga 240
 gccgaagact ggatagattt ttgaagtgtc tcgtgttcaa agaaaacatg agacatgaag 300
 aaaacagtaa aggatttgggt ttttatccgt t 331

<210> 634
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-G12
 <400> 634

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 atcgttatat caagaacaaa ccatacccca agtctcgttt ctgtcgtggt gtcccagacc 120
 ccaaaatacg aatttatgac ttgggtaaaa agaaggcagg ggttgaagag tttccccttt 180
 gtgtgcattt gatttccgac gaaaaccagc aaatatcttc agaagcgctg gaagctgctc 240
 gggttgcttg caacaagtac atgacaaagc atgcaggga ggatactttt cacataagag 300
 ttgcgcacca tcctttccac gtcattcgaa ttaataaaat gttgtcgtgt gctggagcag 360

ataggttaca aactggtatg cgtggtgcgt ttgggaagcc gcaaggaacg gtagctcgtg 420
tt 422

<210> 635
<211> 378
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-012-Q1-E1-G2

<400> 635
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agtagatggt atgaaaactc gtatgatacg tcgtcaagtg gacagaaata aacggtataa 120
caagtacat agtgtaacgc aagacatagc tgttcctttg tcatatgcac aagtcgcaaa 180
gcaaaaagcg tttggaaaaa gagctagttt gctccatacg gaaactagca ctaacattta 240
tagagaaacc aaaaagggtta ttgtagtttc gcgtancgtt ggatacccaa acaacagcga 300
gaaacctcgc ctccgaaagt ttcgactagt tcccaacccc aaccggttgg atagccgtgc 360
tcctcaactc atccgacg 378

<210> 636
<211> 400
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G3

<400> 636
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ggagaacaag gactttcttct tcttgtcgac tagagaagag aagaaaatgt ttgtgacgtt 120
acaacttgcc agggaatatg cagagctggt agatgaccaa ttcttgaagg gcttcttcga 180
gaaggctctg gagtctgctc agaagacgtt ttaatttgtc aagtagagtg tagtgtgcgt 240
ttttctgtgt gtatttgtct ctgtgtgtgt gtgtctgtgt gtgtagtgag tggagccgag 300
tcagagaaaa cggcttggtt ctttcctgtg gacatagtgg gtaaagtctg atgggtttct 360
ccacggcttt ttagtaaata aaagtttgtg tccgtttggg 400

<210> 637
 <211> 370
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G5

<400> 637

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aaaaattttt gcaagcttca acaagcctac acatatatct cctcgtttct taagaccctt   60
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gaggggaatc cttaaggag aaatttgaag ttgagtgac ttgggtatgg aaccaatctc   180
taaggacgac gggatatgaa gtttctcagg aagcgacaac tgcgagagct acttgcagtg   240
cgataatagc ttactattcg gagacttgca gctttcacc atcacttctt ccgtcaaacc   300
ctctccagca aaatctacta ctgttgatag cagctacagc tctgaacctt tccttcctt   360
ggctttgcac                                     370
  
```

<210> 638
 <211> 179
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G7

<400> 638

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gccatgctgc ttcttgacca tcaaaataaa gaacgacatg gtcgcatca tacatcttgc   120
cattgaagtc gttcacttca taaactacca attcctgaag ggcttcttcg acaaggctc   179
  
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<210> 639
 <211> 270
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H10

<400> 639

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cggacgcgtg ggcggacgcg tggggcgtga cttgacgacg ttgggaacca catggttcat   60
ctattttctca gcaataggca ttcttcgaaa actcattagg aaacctcacc ctttacaacc   120
tattgtgttt ttccacaacc tttttctggc agttgctagt ttatggatgt tcctaggtat   180
  
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ctgtgtggct ctaaagaaca cttggatgga aggcggcttg aaagctatct attgtcccca 240
 ctctataaaa acttccaacc cattgacctc 270

<210> 640
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-H12
 <400> 640

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 aaacaagtca tggaagaaca acttcaaatt tggtcgcgca aaatatttgg agtcgtgtaa 120
 attctattta tttccaccaa aaactcaaga agatactctt atccaacgac ttgagtgcc 180
 gctatcagat ggaatatgca acatatacacc accccttcca agaatacaat cttgataaac 240
 ggcgtgaata taatttggat acttttctat atccacttgt tcgataagtt caatcagact 300
 tgcatttctt tgtatagtac cttgagatgg acagcgttta ctgctctctt ctgggggaaa 360
 atatttccat ccaactatct gaacaaagag attgtgttgt gggatcatcat aaag 414

<210> 641
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-H6
 <400> 641

aaatattcct tactatgtgg tggttgggtg gtgcaattgt ggtgactgca aagcgacctt 60
 ctagtggtgt tatggatgcy cttcacataa cgaaagatat caattcaatc gaaggccttt 120
 catggatcaa ctttgctttt acgctattcc tttgtggagt agcagcagtt gacggattgt 180
 tgggtgggaga taagaccagc agctccggca aacagaatac aggagcgaac aatgcttgag 240
 tttcttgaga agttacaaat agtcgtgtct atgaagttgt ctgagttgcy tgagaaaaga 300
 caagtagttg tgtctatgaa gttgtcgtaa atagttgatg tgtgttgtgt tgttttgcca 360
 cagaaaggat gtttcgtcct tgggtggcctt tgcaattgcc attaaatgac acaatttgtg 420
 t 421

<210> 642
 <211> 368
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H8

<400> 642

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 ttgccatctg cttgttatca cggagaaatg cctccaaaag aaaggcgtgc aagttggata 120
 agattctgtg agaaggatgc tggatttctg gtttgtacag atttaggtgc gcgcggctta 180
 gatattccat ctattggtgg tattatcatg ttcgactttc cgaagactac aaccagttac 240
 ttacaccgcg ttggaagaat ccgtaatgaa ggtgtgtgat atactccaat aacgcattcc 300
 tcagggaaaa ttgctgagat atgtctttct gcacatgttg caactatagc aaccaaaaaa 360
 gttgatac 368

<210> 643
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A10

<400> 643

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 aagaacgaga tgctattttg aatggaacaa gtgaagaata cttgagtcaa ttggcgcctt 120
 tagagaatga aaggaaacgt aaactcgata gagctatgga cttttatcaa cttcaactac 180
 aatatgcaga acagctgtat gagttggcca agaaagaagc atatgatagc tttcaagcac 240
 aaaaggcaga acaaagagaa tatatgtggc gtattaagtt ggaaagagaa attaccttga 300
 gactcttaag attatccatt ccactaaggg atccaaacgg acaagtgatt gtaggaacct 360
 ttggaatgga aggctttgtg aatcttatct atcgcaatcg tttattcgaa aattgttcta 420
 aaagaagaaa ataccttttc 440

<210> 644
 <211> 433

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A4

<400> 644

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 gaccatgccc aaggagacgt catatgtaga aactgtgggtt tggtagctgc ggaaagaatt 180
 gtagacttgg gttcggagtg gagaaacttt gaaaacgatg acagcggtag agaccctagt 240
 cgtgttggag ggccgagcaa cccctcctt gagtcgggtc caagtaccgt gattggagga 300
 gtagtatcgg actctaaaag tttgaacgca cgtttaaata gggctcagaa tagacacagt 360
 acttcaaaaa gtgaccgagt tttgttggat gcgttttctt taataagtca gttcgcgga 420
 cgctcttccc tgt 433

<210> 645
 <211> 355
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A5

<400> 645

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 gtgagtgaac ccatgatgct gcttgaagaa gacagtgtcc agcgcgtacc ctttgcac 120
 tgtcccagct agtgctcgag gatgcacaaa gaggggcact cattgtagca ccgcaagacc 180
 cgaagctagt tgatcatatg ccgtccaagc gaagtaaggc tgaaccagta tcagtggaac 240
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 ctctcgcgc gctatctacg tagcgtatgc aggcataag atggtaaata aacac 355

<210> 646
 <211> 217
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A6

<400> 646

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agctgtttgt tcgtctcctt ccaaaatgag gcaatgcata ataagaaaat cccacaagga 120
acaaatgcaa atgattcagt gcacatctgc aataaatgca atgatcgaca aaatggcgcc 180
attgttttgg cgcgtccggt catttttttt cttctcc 217

<210> 647
<211> 367
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A9

<400> 647
agcccacgcg tccgcccacg cgtccgcttc cgtggcacgc atgttcagtt ggtttagat 60
ggaagcgctc atgaataata aaccaagcac caagccaaag tctccttggt tctcttctgg 120
gccttggtgcc aaacaccctg gatactcttt agaaaagtct ctttctaata cagcactggg 180
tcgtttctcat cgctcgacta ttggaaaatc caagctgaag aacgcaatcg aaaagactaa 240
gcgattctcg caacttcctt cgtcttatcg tggtgctatc gttccagggt ctgataccgg 300
tgccgtagaa atggcgcttt ggagcttggt agggccacgt cctgtagatg tttgttattg 360
ggagtct 367

<210> 648
<211> 292
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B1

<400> 648
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ctcttgctcg tgctgatata ttactaggtc aaacataaaa gggtccgata caggaaaaga 120
agaatcgctc aaaggggaag gcttggaaca cactcaagta caatatgctg attgtgagt 180
ttgttggttg ttttggtgaag agaagaggtc ccaacgcaa ctcgtgaaac gactgcaatg 240
atacagacat tactttacac ctttaacagg taacagtcgc acctcaagaa aa 292

<210> 649
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B2

<400> 649

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 acgacttgaa cgaagcagca gtagcttggt ttcgaacaag ttttgaactt gacattcctc 180
 tggatgttga cgttcccatc ggtttgctta tacaggatga tccttcttac agatataatg 240
 ctctcatact cgtcaatggt tggatgctgg ggcactacat caattactta ggaccacagc 300
 atgactttgt acttcagaat ggaattctga atcgactgg aaagaatgat atagccctag 360
 cagtttgggg acaagacctt gctggaggaa gacttgaaa cgtttcc 407

<210> 650
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B3

<400> 650

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 acaaccctg gatctacca ccggaataat gtatagcttg aagcagatgt cgtacattgt 180
 ccagtttgct ttttctgttg tagtcattgc tatgttctcc caagttacct tttatctata 240
 ccgtgacttt aagtgtgctt tcgatgggca ttgggattac gccacgcata gcgaagtgtc 300
 tggctctgtg ggttattgcc gttacttcat tgctttgggg agcatttcca tcgtactttt 360
 agctattgtt gccgtagcta cttttggaac gctgtatttt gaagttccta tggactatat 420
 cttttatggt gaatggggga ttaacgcttt tct 453

<210> 651
 <211> 347
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B4

<400> 651

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tactgtaaag cagtgccatt atatggctcc gaatggattg cccttcagat catcgatttg 120
cccaaccctg tgattgacgt acaggagcac tctatacggt gacgcggaga tcggacactc 180
tccattatgc gatatctggt cgattcagag ctatgtacac cgaaatgggt tcttcactat 240
atcatgacat acaatgatca tccgatgtgg tactcagatt cgtccaggca taatcggttg 300
tccgtgtgta tcaagtcatt gccattagat cagggtgttc gggacca 347

<210> 652

<211> 472

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-B6

<400> 652

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catgagcaaa gaagatggca tggaggcctc aagacgagct cccgaagacg tcattcgaac 120
gcttcacact agacttcctg aaccgaacg tcgggaattg tgggaacaga taaatttact 180
taggcaagaa aaagatttgg cagcaaagga gtacaggttt gaggaagccg caaagttaaa 240
ggaacgagcc ttagagttga tgctgcaaga cccttatgca tgtttggaac tcgaacttca 300
gaaagctatc gaggaagaaa gatataagga tgcagctatc ttctccgatg cgatgaggga 360
aattggtgaa cccccaaaaa gtgagaaaaa ggacacagaa caaaaaagtg cccccaaaag 420
tagaaatgtg tntggctttg ttccgaaaga ctggccgacc aagtcaaaca ct 472

<210> 653

<211> 478

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B7

<400> 653

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gctgccatct atgtctgtta tggcaaaaag tccgtatgga gtgtttgtat accagttttt 120
gctttgatat ttggagcgtt tgatgccttt gtccttgtaa gcataccagc acttttagtt 180
gcagcaatct atgttagtat tccaaccagt atttcaggct ggacttccat aacttttggg 240
ttcgtatttg gtgcaattat tttattatta gagaccggga tgttgaaatt tttggattaa 300
gaaacgacct agccgtatag tataagggtta cacacctata cttatccatt cactgtttct 360
agaaatactc ttctgtccc ggaacgagcg atttgcttgg cttgcctttg cgttccctga 420
cgaaatagtt tcttccagtc actcttttca gcccgtcgga aagctttcca ttctttta 478

<210> 654
<211> 471
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B8

<400> 654

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tttcatggaa tttgcgcaag atatttcttt cgagattggt gaacgtgata cttgggtcat 120
tataaagtgc cgggatagaa gtggactgct tttagatatt attcataccc tgggtccactt 180
caacttgagt attcattcgg ctgtcataga aactttgcgg gatggaagtg tccaagatag 240
atttggtggt cgtagaaaag aggatggctc gaaaataatc aatagagagg aattggaacc 300
tttaaaggct gccttagaac aaattgtcgg agaaaagccc attcgagtgt tttggaaaca 360
aactgtggat atatttcaag ttcttcacat agtttgtcca gaaaggtctc atcttcttgg 420
cgacttggtt tctcttttag aatacgaaca gctgttggtc aaggcctgtg a 471

<210> 655
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-B9

<400> 655

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 ggatttgaag gctattgctg accagatgga tgccttgctg gaagaatttt ttgattccga 180
 ttttgtcgaa aaagctttgt ttagagagga caatgggagc aaggatattg gtccttgtgg 240
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 gagtatttgt ggtagttttt tgaaggcact acaaaatgtg gaacgtggct tgatgcttgg 360
 atttgacttt attcgcaaca aacttttcac tttggatttg ttgggaacta ttttgattct 420
 caattttact cctaacaata tgggtggaag gttttttggg t 461

<210> 656
 <211> 293
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-C1
 <400> 656

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 cgaacgaaac agcgcatcat ttatcatttg caacgaaaga aaggttctgg gatagatccg 180
 aattttgccg gtcaatggga tcaggacatc ctttttcaaa atacagtttt tttggaaaag 240
 gccccctttg gagtacggtt gtggtccaag ggtcccatc ctttccaaat tgc 293

<210> 657
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-013-Q1-E1-C10
 <400> 657

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 attaaccaac ctgggaagaa ccaaagttac cggataaatt acaactcaac caaaatttaa 120
 taacaaaagt tggttaaaat gataaccgga ggtggcatgt gttaaacttt ttttcgagta 180
 ttatattcca tgccatttgg agaccaatt atgatgagcc tggatcacat ttggtagaaa 240
 atattatgan agaagccaaa gaaagaaatg tanagataca ttttccagta gattttgtag 300

tagccgatcg tatggctccc gatgcacata cagagatacg tactagagaa caaggtattc 360
ctgagcatat gcaaggactg gattgtggac cac 393

<210> 658
<211> 310
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C2

<400> 658

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tatacacaca ggtggaagat tgatgcaa atggcgctga acattttgtg atgaccaga 120
agagtgaggg ttatgtagat atacccccat tgattgttgg gaacagtaca cattctggag 180
cacatgtgaa aagtctaaat aatttgata tccaggattt gacatcgaca cctatcgata 240
cggaagtttt tcgggaacgg cgtgcagaag gacagtagtc ttcagtccac cttgaatcgt 300
tttgggcggt 310

<210> 659
<211> 255
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C3

<400> 659

gccacgcgtc cggtgcaa atcgactggg tacatcgctc catggaggat tgcattctag 60
ttggataaag cgaatcatga tcaa atgggacacaa gttcgatttc 120
acctaacgcg aaattattta ttgcccgtag gttttgggga tagagatgga gacaacgtac 180
gatacgtagc agacgctaca taattgattg tgagtacatt gcaaaagaat ctcgagttgg 240
gtatacgcgg tccta 255

<210> 660
<211> 476
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C4

<400> 660

tccgaaacaa actgtcactg agtacaacgt gctttggtgg agtgaattct acaaacacaa 60
tgctattgat gaactagtgc gaaacaacaa tgccataccc aaattcgttt tcgcctagct 120
cgaaatTTTT tactgcaa ataaactttgga gacagagaag gaaacagagt acgatgcccc 180
acaacctcca cttagtgtgat tgtggagaca cagcagagga agtttgaaaa tggaatattc 240
tgttcgaaag tactggactt gacttccaac ggaaagatgg aaaaggatgc aactctacca 300
tgactgcatg gaagcaaaaag tattcggtgt acagttggat agatggacgg cagtcttttc 360
ggctctccgt cagactgcca aatgctttct tcaaatgtct cacttgtgac acttgcagtg 420
ttacgacgtg ccaatcgctt ttaccttttc ccttgaaaaa ttctctctgg aaagtc 476

<210> 661

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D10

<400> 661

gggccgacgc acggtcaat ggagaaggac gagcatcagg cagtggcaag ggaattggct 60
attcgcaaac gactcggaac agtatttaaa aaaaagagag aagactttgc tactgaagaa 120
gaatataata attatttaga agcttttgaa gatgctgtat atagtttgag tgaaggaacc 180
aacacagatg aagcccaagc aagtatggag agacttgcaa agtatatcaa agacactagt 240
agagaagaaa tactcatgaa tccagttttg attgtgggtg atgagagcga ggacaagaat 300
aatgagagta gcgaacaaca aggagtgacc tttgtcgatc ctacaagacc agcaaagcct 360
atgcctgctc ctttacgaga caacagtcct gtggatgaga agatgcgtgc aagagcttcc 420
ggattcgacg aaaaactatg tcgtcaacga gcaactg 456

<210> 662

<211> 263

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D11

<400> 662

acccacgcgc tccagaaata ttatcctgtg ccaaataaa ataaaaaaaa aaaagaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aagaaggaaa aacaaaaaag aaaaaaaaaat aggtcagcca 120
 cccaaaaggg tcaaaactca tctaaaatat caacaggggg tcatttcact gcgatatcgt 180
 cttcaacatt catttcaggg accttcctgt gttaccccg tgtctgcgaa ttcccgaca 240
 attcccttc tttaccacct tgt 263

<210> 663
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-D4
 <400> 663

caccggtccg cccaaagttg cacttcgacg gtacgccggt caaacattgg aatcggataa 60
 attcagcgaa aatgaaatac ccttaggtaa aggattcaga acctaaaaa tatttggagc 120
 tagacgattc gttgcagcag ccagtgggtt catctttag tagaccaagtgg ctgtttattg 180
 caacccccact gttggaagtt gcatgtactg atgggcagcg aattgaaatg attcctttga 240
 agaaagatat aaaggaattg tttttctcta ctttaaggaa gaactttgag tcgaacgaag 300
 cgtcatggga gtgcattgta gttgaaaccg cagttgctgt ttttagccag tattatgaac 360
 agtgtgtgga acagtactat ctagcacgca tggattatga gctacctggt tagtccaaag 420
 taaaacagat tcggagtatg attgaacatg tt 452

<210> 664
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E1
 <400> 664

tgtcatcctt gtgagtagtg ataataaggt ttttgaagta tacacaagcg ttgtatcccc 60
 ttctgaaaca ctattgtccg tctcggtaga cactgtagac atataaagca ttcccttgcc 120
 taacgtggaa ggacgacttc ttgcaaaggt tatcgagtat tgtagatatc actcactctt 180
 aaagaccatt ccgcagtctg atgaggatat tgagcgctgg gatagggaat tcctaaatgt 240

cgatcaacca accctttttc aattgactct ggctgcatat tatttggata tcaagagctt 300
 gttggattta ccttgtaagc gagtatcaga tatgattcaa ggcaagatgc cggacgatat 360
 aagataagag tttaatagtt gtaatgattt tactcccgaa gaagaataat 410

<210> 665
 <211> 477
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E11
 <400> 665

ggctctagaat taccgggctc gagcacgcgt caacactttt tcataaacta tttgtgaagc 60
 tacaatgcca tcacgaggag acataaacct aagagatact ccaaagttc atgaaaaaat 120
 agcacataaa caggaaacag gaaaagtatt cttctctttt gaatatttcc ctcccaaac 180
 accatcagga gtggataacc tttatgacag aattgaccgc atggccagag tagaaccact 240
 ttttgttgac gtcacgtggg gtgctggcgg ctctacgtca gatgtgacac ttgaaattag 300
 cggaacatt cagcgctatt ttggtttgga tgtatgcatg cacctaacgt gtacaaacat 360
 gccagcaggt aaagtggatg aagcattgaa tgctgccaaa gaaagaggca taagaaatat 420
 tgttgcttta agaagggatc ctccaaaagg agaagaaatg gttagagtaa aaaccat 477

<210> 666
 <211> 54
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E2
 <400> 666

ttatatatag atatttttat attgacattc atatatatat atatatatat atcc 54

<210> 667
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E4
 <400> 667

cacgggccccg cgatattgta caaccgttgt tggctccgtc gtccggaatt cctagtcagt 60
 ttggttgaca tttggtatat atggcaactg cagtggagg aaaacaagaa acagcaaagg 120
 acaccaagtt gaacaaggcc tttgacctca agtcattctt gaaggacctg gcagctggag 180
 gtgtagctgg ggcaatctcc aagacggcgg tcgcccctat tgaaagagtg aagttgctac 240
 gtcaagtga gtattcaaat ccgcaaatcc cggaggagaa acgttataaa ggcatcatcg 300
 actgttttac aagagttcca aaggaacaag ggtttatctc tttctggaga gggaacatgg 360
 caaacgtcat ccgttacttt cctacgcatg cccttaactt tgctttcaag gac 413

<210> 668
 <211> 106
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E6
 <400> 668

agacagaaca tgagttatga cataaattat ggaagtaata caagtggtag gtggagtaat 60
 aatgtatcat atgatcgaaa gactggcgaa ttttaggaag gattac 106

<210> 669
 <211> 480
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-F1
 <400> 669

cacgcgtccg cccaaacgtc cacggacgcg tggggccttt tccgaaaaca ctaaaggaat 60
 gaagacgact tggttacaag atattggata tcttattgaa gttgtttgta ctcaagaaat 120
 acaagtgaat ggctatcttt atactgtaga ccctaatact aacaacttga tattgttgaa 180
 cgactatgac tcaacgacaa caaagtttca tcaactgact ctgggtcatgg gatccgctat 240
 ccaagagatg aaacgactgc aagtaaccga agaacctgag cttacaaata gaattagaca 300
 aacggaccaa gtggaacaat tgtagtgca gcaacacacc atggaaacaa cacaagtttc 360
 gagtgcgata gaacagcgca gaaataaact gttggagctg ttgaacaagt atccttgga 420
 aacggaatgg gatccgacta gtggaattat tcgtgtgatg gaaggactcg ttcgaataga 480

<210> 670
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-013-Q1-E1-F10

 <400> 670

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 gaaagggact ataacaaaa aggtggatat tcaaaaggga aaaagcccag aacccaatat 120
 aaggtatcaa agtaaagaaa aaaggaaaag gagaagaaga gaggggtacgc ttagaagcag 180
 canaccagag aggaaagcgt taaagcatga aagaaaagaa atccgaaaaa gaagagaaaa 240
 aggtaagaaa gaggaccgaa tcagggtaag aggtagagga gcaagaagag aagagagaaat 300
 gctgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag gaaaggttta 360
 cgagagaacg aagtagaaag aagagagtgt aaggcggcgt cataatagaa atccgaaagg 420
 agtangaaga aaagagagag a 441

<210> 671
 <211> 476
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-F2

 <400> 671

cacgcgtccg cccacgcgtc cgaccacgcg tccgcccacg cgtccgcca cgcgtccggt 60
 tatgattgcc ttctcgaag cctctcgttg gagtaacttg ccgacaaata gttccactt 120
 gcaaaaaaga gtggtgcttg caaggccttg tagcatatct gttgtaaaca ggccgtatcc 180
 tcctcaaaga agcagtttaa cctgtatcaa aagcgtgctt tccaacgcaa ctactataga 240
 gagtgctgtt tccacactaa acaactctaa atttgaacag ttgcctctga cgcagcttgc 300
 cgagctacaa gacaaacttc ttggagtaac ttttatttcc ttgtctatct tcaactgtctt 360
 gttactggca tatctgggca gaaggatagg ttaacttctt cgttctataa gggactcga 420
 ctcgttagga gtcgttcaca atacaagctc ctaaataaat acttcaagga ctgtgt 476

<210> 672
 <211> 502
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-F3

 <400> 672

acgggtcgat atccggatcg agccacgcgt ccgcaatgag gcagttgggc gtcgcttttt 60
 gtttattagc catatgcgtt gtttcaacaa tacaagcaca aggctctagt actcttgctc 120
 caacaggagt tagttctatt cctactagtg ctgttacagg cgctacggga ataccaacta 180
 gtttccctag ttcggtttcc acgggaatac caaccagtgt accaacaaca tcattcttga 240
 ttactatcct tactgtcttg caagacaacc actttgacga tacagtacaa gctataaatg 300
 cggcaggact tgactctttg ttttaacaatc cttccgctac tcttactttc tttgcagcaa 360
 atgactctgt atggtctact tctacagctt ctcaagctct gagtgctctt ccaaccagtg 420
 caccaactgg agcctcatct agtagcagta gtagtgagc atcgttcctt agacgtgtca 480
 ttcttggtgc aacattcaat ca 502

<210> 673
 <211> 485
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-F8

 <400> 673

cgggtcgacc acggttacgc ccaagcgctc gtgagacatt tatggacact tcgactattc 60
 ttgcagtgtt ttatggatat aatgatgagg gctttaaggc cccggaaaac cccaagggtca 120
 tgaacacagc aaattgggta aggctaacca aaaaggactg gtcccaattc aaccgccaag 180
 aaaaacccaa taaagggtgcc taatttgga aatttcccaa cgataattat gatggcatcg 240
 ctacggaaaa tggattcaaa ggcaatcctt gggttctgtg tacttttagga atggcaagat 300
 attactttga attagccaaa cgattctcgg aatatgcaac gctgaatata tcttctcgtt 360
 ggatgctacc tctattagaa catttgcgaa cgtcttattt caagttgaat ccatctatgc 420
 catccacttt tcatgttgga gagactcttc agaagccaca attgtgtcag attgcacaag 480

ctttg

485

<210> 674
<211> 491
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G2

<400> 674

cacgcgtccg aaggattatt acatatagct gagtggcccc ttttcaggaa gtacctttac 60
tttctatgct tatattgtct aaaaagagga gggaagaaaa taaaagagct tccttagact 120
ctattcagtt tcctgtactc gatatagcga gtccgagtcc ttctgaaagg agtatcgacg 180
actgctccga cgacagtcct ttcttgcgag aaaggttgtc ttctttgggt ctggggatta 240
agacagtaga aaaggatggc aactgtcttt tcagtgcagt ttctgaccag ctttacggaa 300
caccagagtt tcaccgggac ttacgagaag cagtttgtgg gtttttgcag agtcacgaag 360
aagaatacag tagctttgtg gaagaagagg atttccagag ttatatcagt aatatgagga 420
agatgggtac atgggcggga aatttagagc ttcacgcaat ttctattctg tataatgtga 480
acgttcgaat c 491

<210> 675
<211> 155
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G3

<400> 675

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agcgcagcat cctatgaaga aagtgacgag gtaggacttt cgtaagcta ctatttcagg 120
ttctcgatga cagaggtgca ttctatcgga tatca 155

<210> 676
<211> 381
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G6

<400> 676

ccgggcagga cgaaatgtcg aagaatcatc ggagttatta gacaaccgac caatgtttcg 60

tgccgttcgg aacaagaacg acttggtgac aagttactac gtttcacagt catatatatta 120

ttgtagaagg ctatttcatg cagttgaaga acagccttcg ataaacttgg gaaatataag 180

ggataatcca ggtgctcgac aaaaggaaaa gagagtagga cgtggcaatg gtagtggccg 240

tggtgaactat tgtggaagag ggataaaagg acaaaagaag cgacaaggag gtcacgtgaa 300

accttggttt gaaggagggtc agacgcctct tttccaaagg ttacacagca caagtttcaa 360

agacttggtg tgataatcat g 381

<210> 677

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G8

<400> 677

cccaagcgtc cgcggacgcg tggggcagcg tttgcaattt ttgttgtagag tgagtagtgt 60

catggcagag caacaaagaa gtgagagtac tgaagttaga agtgctgcag ttcccacccc 120

ttgtataaag ggttggtgggt tttatggtac ctcttcact cttgacatgt gctccaagtg 180

ttatagagaa catttgcgcc aagaggaaca aagacttcaa gtggagtctg tatgtcagca 240

gcagcaacaa caacaacaac aacaacaaaa gcaggataag gaacaagaaa tgactcaggg 300

gtccgagttg cacgacttgc cctctaaaaa ggagcaaggg gaagagactt cgggtggaggt 360

ggctcaacct agccagggtt ttgttgcgga aagttgccga ggggaaacct cggaatttgt 420

acagtccagt caacaggagg aaagagttca acaggggggt gc 462

<210> 678

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-G9

<400> 678

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cactaaagga aaacggactg ataaagactg aaagacttga gaaaacactg ctactgtag 120
 atagaggcta tttctgtaaa tatcggcctt atgaagactc cctcagccc attgggttga 180
 acgcaactat aagtgtcct catatgcacg tcacctgttt ggagttgttg aacgagcact 240
 tgaagcctgg aagcaaggtg ctggacattg ggtcaggttc tggctattta acagcttgta 300
 tgggcgtcat ggtagacca aagggtcttg ttgtgggtat cgagcacatt ccgggtcttg 360
 ctcgacaatc tatagagaac attgaaaaga gccaaaagga ctttttggat gaaggggttg 420
 ttaggatagt 430

<210> 679
 <211> 460
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H1
 <400> 679

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 gacagttgca tatagcagag caagtgtaga aacttttgaa cgcactgaaa ctacctcgcc 120
 ttttggtcat gttggtagta tctttggttt agcaagttgt cttttttcaa tgcctatgcc 180
 aaaatccgtc atagttgttt ctccatttgc gcatttcta tatatatcat ctggagattt 240
 agagagactg gtttccatct atccacagtg caagttggat ttataccgaa tggcagcaat 300
 tgaaatggtc aatctattgt acccggaggc tgcacaagct cttgatgaag cggatgaaga 360
 taccgatagt cgggactgga agtctcgca attggatgaa gatttcatta tggaaaaatt 420
 ttctgatagg aaagacacag agctttctca acgagaagaa 460

<210> 680
 <211> 484
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H2
 <400> 680

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 gtgtgactgt tggtagatat tgtgaaagat gggagtcaaa gttggtatta atgggttttg 120

gagaattgga aggctagttc ttagagctgc tttggagaaa cagtctgtag atgtggtagc 180
 tatcaacgat ccctttattg atttggacta tatgggtctac atgttcaa atgactctgt 240
 gcacggcgct tatccaggta cagtggtagc aaagaatgga aaacttgctg tggatggaca 300
 cgaaatggca gtgtttgcct tccgtgaccc tagtgagatt ccttggtcct ctactggagc 360
 agaatatatt gtggaatcaa caggagtatt tactgctgca gataaagctc gagcacatat 420
 gaagggaggt gctaagaaag taatcatttc tgccccgtcc aacgacgctc ccatgtttgt 480
 gatg 484

<210> 681
 <211> 290
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H4
 <400> 681

ccatgttata gttgtatgga gaccatgggt agcgccaccc tcagtagtat gtctagagcc 60
 agcttatggc tcacaagggt cttttgtac acagtcattc tcgccttttc tatccccaaa 120
 agatggattg atggaaaaaa aggccaaaat ggttgggaaa aaaacccttt aaaaaatggg 180
 aaagtcctcc acttttgctc aaaaagtgcc actacgatga cggcgacaag cagtaacttt 240
 aacggaaact cacacacttg caagtaagtc aacccttaa cgtctcaaaa 290

<210> 682
 <211> 463
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H6
 <400> 682

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 cgattgttct ttagggtttg ttagaatata tccgcagctt gttgaaaagg aaagggcatt 120
 gcgtcattgt tgttcagag ggcgtggta tggatttatt aaaggatgaa gttgatatgt 180
 ccaaagaga tgcttcgggt aatatcaaaa tgccagatat tggattgttc ttgaaagacc 240
 acatcagtc gtggtttacc gagcaagtac gaatggaaat aactctcaag tatattgatc 300

ctacttatat gattcgaagt atacctgcaa atgcaagtga ctggtttgat gtgtgggttta 360
 ttggcccaat cagccgtaca tagtgccatg gctggctgag gtggttttac aattggagtt 420
 atcaataccc aatattccat tattccaatg catgagttgt cct 463

<210> 683
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-013-Q1-E1-H8
 <400> 683

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 atgtggatag tattaccctt ctcatgtttg gaggtagtat gaaagaaaag gccaaattgt 180
 tggatgccaa gtttctaagg aagtattatg aggagaacaa ggactttctt ttcttgtcga 240
 ctagagaaga gaagaaaatg tttgtgacgt tgcaacttgc cagggaatat gcagagctgg 300
 tagatgacca attcttgaag ggcttcttcg agaaggctct ggagtcctgt cagaagacgt 360
 ttttaatttgt caagtanagt gtagtgtgcg tttttctgtg tgtatttgtc tctgtgtgtg 420
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<210> 684
 <211> 497
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-A2
 <400> 684

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 caaattcatc atatcgacgc acgctaaagg atacagaaat tgccatatcta tacatatggc 180
 tgcaaagtct agagcgcttc catttctgga agccccaaaa aagcttgacg gaacgattcc 240
 aggagatgca ggctttgatc cactgtatat ttccgataat atgaacctgg actatcttcg 300

agcttccgaa ataaaacact gtcgagtagc catgcttgct gccctcgggt atgtagctca 360
agaatttatt catcttcttg gagatgtctt tagcgagagg catgccttgg cagccattca 420
caaggttccc ttggaggggt ggatacaaat tacccttttc atcagtctga ttgaaatagc 480
gacatttcgt actactt 497

<210> 685
<211> 468
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-A3
<400> 685

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tcgtgtcgtt atctcttgcg agattagctc cggtaggacg acgctaccaa gccaaacttg 120
aatcatcgag atgctttgtc gattgatagt tcaagtatat tttggaaaag aaagtaatgc 180
agggacgact tggcttgcat cttctcggtt gtttgccctt tgttgctact gctataagtg 240
ctcagagcga cccagagtga aactgaacca aacgagcgag gttgtgctgt gacagagaga 300
gagaagaaag ttgcagaaga aagacggctt taagtctttt cattgcaaca agtgaacac 360
agataaattt atgccgcagg acaaaataac tagtactaa gtataaggtg ctttggtgca 420
gttcattcta gtagcacaat atcatcgatg agctactaca agacaaca 468

<210> 686
<211> 499
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-A4
<400> 686

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agttgcctga atgaaatgaa gtgtcattgg ccagaatacg cttcgagtct aatggaaagg 120
ctcgatcctt ctctccaacg tcgtgctgtg aattctctgt caacaaactc agacaaatca 180
ggttcgacga agcagagcaa ggatcgcaaa actatcaaag agctgaaagc cgaggccttg 240
gagactaaaa aaagcggctt gaatacacgc tccgaaaccg tggcgcacga cgaagtaaca 300

actctctcct ctgcaatata tcaagtgaga attgacggag ccaaaagtag tggcaagtgt 360
gctgcagaga aagaaaactg caacaacgtc attcctggcg acaacaaaca gacaagggtca 420
caagcaatcg gaacccgcaa tcttcgaagt agaacaattc ccaagcccaa ttaaagtact 480
tgttttatat ttcgctgat 499

<210> 687
<211> 222
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-A5
<400> 687

gtcggccac acgtccgtga ctattatttg gaaatcgttt tttctatttt ggttgatatt 60
gcattactat cttgtatata cagttctaac gtgttggaat agattccatt ggcacttatt 120
cgtacaaatg catattttga tcaattagta atgggtgaaa atgcaattcg gggcccgtag 180
gttcacagcg gttacaactt ttcctaagga aaccttagga aa 222

<210> 688
<211> 367
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-A6
<400> 688

tgttgacggt ggccaattat gagaatacgt cgtttgaacg aacaaggaga agaagaagac 60
aaagaagacg aacaagaaga aatgcaaagt gaagagttga caaggagttg ttcggaattt 120
cttctttcgt attcttccga aatggtagac tgtataacct cattgagcga tgacgacgaa 180
gagaaagagt cgttcgtggc ttctcgactt ggacaaaaac tgggaaagat gctggaaagt 240
tatgcctcgc attgtagtgg aaaaaataag actttgttgt ttcgtcatgt tccggacgac 300
acaccaacga agcattggct tatcgacaag ttcaagttac caacgagaac cttacgggtt 360
accttgt 367

<210> 689
<211> 445
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A7

<400> 689

cccacgcgtc cggtgagtga gaaatgttcc gaatcgtttc ctttcctacg actccaagta 60

aagaccagaa accaggaact tcaggttttac gaaaaaaagt ggaaacattc agaaaacaac 120

aatatttggg caactttgtg cagagtattt tcgactcgct tccagatata caaggaaaaga 180

cacttggtgtt gggaggtgat ggaagattct acaactccaa agcaatacgt attattgccc 240

gaatggctgc tgctaattggc gttggaaagc tgctgatcgg aaaggatgga ctcttggtcca 300

ctcctgcagt gtctgcgata atacgtcaaa gaaaactata tggaggaatt atattgactg 360

ctagtcacaa tcctggagga gcggatgaag actttgggat caaatacaac gtttcaacgg 420

aggtccagca ctggaaaacc tgact 445

<210> 690

<211> 457

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B2

<400> 690

ccgggtcggg cagcgcgtccg gccaaacgtc cgaaatagtg agagtaatgg ccatagtggg 60

agtcaaagcg ggaatctgag aggaggacag ccacgttgga actgacaata ggtccaaaca 120

agagacgtca ccagtgggga caattgtgca gagtacaggg aaatatgacc caatattgaa 180

gactgtagta aacagtggag gaagtaaaag gagggattga agggaagtta tggcggaaac 240

acgtgccagc agcagtggta acacctgtgt agcaagcttt gagcaaaaca tctgggtgta 300

aaagtcgatt aatagggcaa gtgttaaagg gaatggaaaa gggagaagga aggaaaggat 360

gaagtgcagg aatctctaca gaaatgcctg aaggaaagca aaggaagaca cagtagatga 420

cgcgataaat catgcgaagt gacacggggt atgaacc 457

<210> 691

<211> 165

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B3

<400> 691

cgggtccgac acgcgtccga caaaaaataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaataaaa gaaaaaaaaa aaagaagaaa aaaaataatg gatcttcaaa aaagtaataa 120
aggggagaac tcgggtggcg ctttcaatag tttggtgtct tgggt 165

<210> 692

<211> 355

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-014-Q1-E1-B4

<400> 692

gggtcggaca cgcgtccgcc cacacgtccg cccacgcgtc cgcncacgcg tccgcccacg 60
cgtccggttt tatgaaccag ttattcgatg gctaactcca tccttcgtat ctgtgactgt 120
gccacaagtg atgaagacga cgactgacga agattcggtg tggagtacaa aatctggata 180
tatcccacaa gtcattgtgg agagcaccaa tggacataag anaaagaata ttcgtcgtga 240
aaagagccaa caattggaac cactaccttc attatccgat gtgattcggt ccgttgggtct 300
ggtggcagtc gcacttcaag aaaaccaacg accagcggac aaggactcga aaacg 355

<210> 693

<211> 314

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B5

<400> 693

tccggtaaaa agatgatagt gtgtggatat aactgagtat cacgaagaag agacggacta 60
tatgaggaaa gaacgatcaa ggaattaaga ttactagaag gagtaatgtg catgagggca 120
cgaagggtact tgaacaagat agtgtatagc gcgtatcttt tgcacaatgt cccagcgagt 180
caaagaggaa gcataaagaa tgataaagaa gtatccactt attacctag gctagttgat 240
cttatgctgt ccaagcgaat tcacgctgaa gcagtatctg tggaaaaaga tttgtaagag 300
atcgcataag gggt 314

<210> 694
 <211> 437
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-B6

 <400> 694

 cccacgcgtc cgccacgcg tccgagcatc ttggttgcga cggagtttat tgtggttgtc 60
 actggtgagt cgtttggctt tacaatatgt cttcgcctag taaacgtcgt gaaatggacc 120
 tcatgaagtt gctcatggca gactatgagt tggagctctc ggaagagaac caagcgagtg 180
 acttttatgt gaagtttcat ggtccttcgg aaactgctta tgaaggagga gtttggaagg 240
 ttcatgtgca gctaccggac gcatatccct acaagtctcc ttctattggt tttgtgaata 300
 agatatatca cccaaatgtg gacgaagcgt ccgggtctgt ttgtcttgac gtgataaacc 360
 agacgtggtc gcccatgttt gatttggtga atatttttga agtttttcct cctcagttgt 420
 taacctatcc aaacccc 437

<210> 695
 <211> 284
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-B7

 <400> 695

 gaacagatgc cttcccagca aatacaatac tctgaaaaat attatgacga tacctatgaa 60
 tacagacatg tcattctaac tccgggcata gcaaaactgg tccctaaaaa cagactaatg 120
 tcccaagcaa aatggcgcgg tctcggagtt taaaagtcaa agggtttgggt atactatgca 180
 aaccatagtg caaagcccaa tatattgttt ttctcaaaac cccaacaaaa aaaggggcaa 240
 cagaatccca ataattattgg ttgtgaaaaa caacaaaacc ccca 284

<210> 696
 <211> 153
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-C1

<400> 696

gggtcggaac acgcgtccgg acaaaggaag taagagtaag agaaggagta atgtgaatga 60
aagcaggaaa gtatttgaag aagagagtgt aaagcgcgta ccttttgcac aatgtcccag 120
cgagtgaag aggaagcaaa aagaagaaa aag 153

<210> 697

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-C12

<400> 697

agaattgagc ttctcacca gaagaaatgg tctactatct cacaacacac gatcctgaat 60
atattataga cactgggttaa agataagttt gaaaacgaac acttacttca gtatgggttg 120
gaagaagacg tttgggtcca cgtggataag cattcgtctg ctcacgtata cgtgagaatg 180
cctccaggaa aaacgataga ggatattccc cctgatattt tagaagattg tgcgcagtta 240
gtaaaatata actccatata aggaaataaa ctccacgggtg ttgtgggttg ttaaactccc 300
tggagcaact tgaataaaac aggaaatatg gatatcggac aagttgggtt taaagataga 360
aagcgtgtta agagtataac tgtagaaaag aggaagaatg atataattaa c 411

<210> 698

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-C3

<400> 698

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ccaaagggag gaaagaaaga ttcttcaaag aaagaagcca caagtaaacc tgcagcagca 120
gatgctacaa agacgacaga aaagtctggt ccggaagcca agttgaaggg aactgggtgca 180
aagaaacaat aaaaagttga ctatgcatgt tctgttatg ttttgtgagt tctgtttgat 240
agtttccagc tattcttttg gtagtgaata aagagaaaat tttttatatt taaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaagaga aaaaaagaa aaataaaaaa aaaaaaagt 360

aaaaaaaaaa aaaggtaaaaa cttatgtaaa aagagaagaa acagaagaac aggggataaa 420
 cgggtcaagca acacaagaaa tgaaaaaaaaa aaggggggggc ccccaaaga gggtc 475

<210> 699
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-C4
 <400> 699

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 gagaatggat atttcctatc ttatgggggt ctccttggtc ctattcgtat tttccggata 120
 ctcgagttgt cgagttgccc atcgtttagtg gtgaagaaac agttatgggt gcaggtttac 180
 agtccagaaa tgggtgctcga gtgttattaa caggttccac agatatttgt gccaatactt 240
 tacctcataa tagtgcggtt tgtagttggg tcgtccgttg ggctttggga caacgcggaa 300
 tgcttcgaat tcggaattgg cgacatcgca cctcatgaa ccaatccacg acccatgcgg 360
 tttccttttc ttcttcgaat cctacgagct accgagtaga agatgaagta gagttttcta 420
 tggatatgga agaattgggat 440

<210> 700
 <211> 132
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-C6
 <400> 700

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 agatgccgtg gatgacaata tctaataagg gttctccttg atactggatg cgtataattc 120
 cgggttatcc ta 132

<210> 701
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-C7

<400> 701

cccacgcgtc cgagaaattg ttacctgcct tggagcagtt gaaatcctct tttgataaca 60

aagcgaagga atttgctgaa aatgtgaaga taagacgaac tcatttacag ggagccgttc 120

ctctttcttt tggccaagag ttttctggat atgttactca actttcctat gccagggaaa 180

ggttgcattc atgcctaccc cggctatatt atttagctat tggtggaaca gctgtaggta 240

ctggtttgaa tactcgcaag ggctttgacg agaaagtttg tgctgaaatt gccaaagtata 300

caaaattacc ttttcaacct gctcctaata agtttgaagc ctttgcagct catgacgcat 360

tggtagaatg taacggaata ttaaactacta tagcatgttc cctaataaaa ata 413

<210> 702

<211> 453

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D2

<400> 702

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gagtgcacaaa gttgtctttc gatgtctagt gttgatgcgc atccaacaat agtttatcct 120

cattatgtca gagctttaga tgaagaaaaa gctcaactac catctagttt tcctcgagaa 180

tattcggaag agtttcaaca cattttaccc aagttgttgc agcgcgggtt tcataacta 240

accaaactga acaacacaaa gggtaattta tcaaatattt cgaaaaactt tgtgttgagc 300

catccacata ttcacgtcgt tattcttcga agagccctgg atgggtgctgt tatttacctc 360

gcttacgtgg gttcccatgt acaaggtcct tcgggtttta tgcacggagg agctacagca 420

gcactgttgg acgactgtgt cagttctgca gtt 453

<210> 703

<211> 326

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-014-Q1-E1-D3

<400> 703

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 attgcagatt cctgtatcaa gaagctcaac aaggaatgga attatataca aaatgttgga 120
 ctaagtcaag taagtcctgt ttcttggtat tccatcgccc aacagaccga cgagcaaagt 180
 gtgatattga atgcttatgt ccaacacaag tttgtctctc atcgttttgt cgaagaaaca 240
 aggaaaacca catgaaagga aaaagcanat gggataagat gtggacgtgt ttattcgccct 300
 atgaagaaga aaactgggtga atacaa 326

<210> 704
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D4

<400> 704

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 gcctggcatt gggtattctt ttgtatTTTT gtgctttaga gtcgtttctt ttctttgctg 120
 tcatcgctca aacgaaaagt caggaaccag aagtaacaaa cggatttgct agagcctttg 180
 gatttctctt tcttgcagaa tgtctttggt tgctatgttg ggtagtttct attcagttat 240
 ctacgagatt tagtgtgcag tttctgaata gagtttttat cattttcttt gtacttggat 300
 tgattgtttc ttgtatagga ggaggttacg ttgctatccc ggaatggaga cgtcgtagtt 360
 tgcgtcattt cattgtagtt ttgtgttttc ttgccacggt tctctattgg ttttcttttt 420
 catcgtcgtt gggagttgaa ttggatattc cttttataga catc 464

<210> 705
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D6

<400> 705

gggtcggccc aaacgtccgg ctaagtcgga agagtcagac aacgaaggcg tggagatcaa 60
 gttagagact gcacctcatg atcctcgctt ccaaactact aatcaagcca agcactgttg 120
 gtcgagatac atcgagtatc acgcttgtgt gaaacaaaaa ggtgaagagg acagcgagtg 180

tcaaaagttt aagcgatggt acaagtcact gtgtcctatg gaatgggtag aaaactggga 240
cgaacagcgt gccaacggta cctttcctgg tcccgtgtag ttgtactggt ccacgtgggc 300
ccttttggag tttaactgac ctgttgctcg tattgtccgt atggcttttt ttgttcaata 360
aagttttatg tggtagattt tatgttcgc 389

<210> 706
<211> 318
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-D7
<400> 706

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gtgagagAAC gtacgagaaa gccAAGtgag gaaaagaagg caagtagagg gCGGCCcgag 120
aaaggagagg gcgtaagacg tgatacagag taggaagaaa agagaagaga gctagaaagg 180
aggtaaaaga agagtaaaag gactagaaga ggtacggaat tcacgaggaa ggagcgtgaa 240
ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcg tgaacggatt 300
ttgtacacac tgcccgtc 318

<210> 707
<211> 298
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-D8
<400> 707

acgtccgccc aaacctccgg aatctgctgt caaatgagag aacatccgat aaagccatgt 60
accgcataat acgcacgtcc aaggcagtcc tcaaaccgag caggcttgat acatgataca 120
tcgatatgca cacattgtat gagacctaga agtgaagtag acaacgagta tcacgactat 180
aagcgttacc gcattcaaca ggaacgaacg tgaaggaatg gaggaatccc aactaatacc 240
ggaacaaaaa gtttctttca aaccctgtac ggattttgtg tacaatgctc gtcaattt 298

<210> 708
<211> 428
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E12

<400> 708

agacgacatc tgcttccgaa cactgaaact gagtaatcca agctatgggtg accttaacca 60
tttggttttcg gcagttatgt caggaattac ctgttcgtta cgtttccctg gacaactgaa 120
tgcagatcta aggaagttag caaccaactt gattccattt ccacgtctac actttttcat 180
gattggattc gcacctttga gttcaccagg ctctcaacaa taccgttctg ctagtgtttc 240
tgagctgact caacaaatgt ttgatgcgaa gaacatgatg gcagcatgtg accctcgtca 300
tggtcgttac ttaacagctg ctgcgtatctt ccgtggaaat atgtccacgc aagatattga 360
tgatcaaatg tttaatatcc agaacatgaa ttcttctac ttttgtaaaa tggaatccca 420
aacaacat 428

<210> 709

<211> 307

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E2

<400> 709

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aggacaaatt gtagataaaa aagaaaaaaa aaaaataaaa aaaaataaaa gaaaaaatgg 120
cggcgggtcca acactatgaa tgattgagtg catgcttctt gaatatattc gtttatgcag 180
gatatacctt catgacgttt aggtggtggg gtttcagatg cgtcaccact gcttgaggat 240
tgggggttcgc cttgattatg gaatatcagc ttatgctagt ttggctgggg aacttatgcc 300
tgagaag 307

<210> 710

<211> 483

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E3

<400> 710

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 accaagcaaa acaaggttgg aagtcgatga tatcaccaac ctattggaaa tcaaattgat 180
 ctgtgttatg gaatgaacga gtgaatgtgg ctcttccttc gtgggaaacg gtatccaaag 240
 ccagcgagac gataagcaga caggtaaaag agtcggcaaa ggaactaggt ggttttatttt 300
 ctgcagaaga agattgttta caagcaacat cgtcatctgt aaaaaaagca ccttggggaag 360
 tgttgacacc aaaggaaaag ccttttgcaa aagaaataga agaaaaagta ctccatatga 420
 cgagagaatg ttatcagtct aagaacaaa gagaagaaac gttcctttct ctctcttcgt 480
 tgc . 483

<210> 711
 <211> 316
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-E4
 <400> 711

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 ttcaagttgt tgtctacaag ccaactgtct acatagtata catatgtgac ttgtcgtttt 120
 attgcaacaa ggcatcaagc tcctaaacct aacatttgtc gaactctttt cactgtcgag 180
 tcttgagaca agtcgtacgg ttggtctttg ctgggtatct ccaaaactgc cggaatagga 240
 gcacgatagc tatgcacaag ctacgaatt ttctcggcaa ccttgtagct atattaaaac 300
 agcataatat atctac 316

<210> 712
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-E6
 <400> 712

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 cctggttctc gactcctgtt ggtacgacaa cttgagtagc tttctctcct tttgtcaaag 120

cagtcttctt gcgtccagtc ttttgttcgc gattagcctg cttgatttgt tttttaaaaa 180
gttacagagt ggtgtatcgg tccctatttg ttgtgttccc ttgaacaaag agaaataggt 240
tgtttaaagc aagacaagga agcgtttgat ggactaaaaa aaaaaaaaaa aagaaaacat 300
aacaaggatg tacaaaatca agaaaaacgt tcagtcgaga tccgacgcca taagaaagaa 360
aaagctaaac taatataaaa aaaaaggggg gggccccca aggggtctaa gtttaacttc 420
ccgttaaagg gaatttaaa 439

<210> 713
<211> 368
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-E9
<400> 713

cagaagagga gttatgagag aaaagatgga agtaatagaa gtggtaagtg gagtaataat 60
gaatcatatg aaagaaggaa tggagaatat aaggaaggat tacatgaagg aggagataat 120
aggagaaatg ataaggtgga tatatatatc gataataagt gtgatagtaa tataaaggag 180
gagaaagaga ggaaagaggt gtatgatgca ggcaaagaag tgacgcagta gatcagagag 240
taacacatgc aagtaggtaa agcgaacggg tgagtaaaga ggtgtgaaag agtggaagaa 300
catgaaagca cagaagaatg taagaaatgg ttagagtaaa aaccataaag gaagtaaaag 360
cggggaatc 368

<210> 714
<211> 492
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-F1
<400> 714

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gtaaaccaaa gagtcgctct tctaaagccg gccttcagtt tccagttgga cgtgtaagta 120
gattcttaaa gaatggaac tatgcagaaa gagttggagc tggagcaccc gtgtatttag 180
ctgcagtttt ggaatatttg actgcggaag tgttggaact ggcaggcaat gcagctcgtg 240

ataacaagaa aacccgtata gttccacgtc atattcagtt ggcagttcgt aacgacgaag 300
aacttaacaa gctgttgggc ggtgtgacta ttgcttcagg tggcgttctt cccaacgtcc 360
atcccaatct gctaccaaag aagaaggcaa aggaagacat gcagtaaagt tttccttgag 420
ctggtgtttt tgaacaccac ctttataaga aacttgtcac tttattggaa tgtattgaac 480
atgtgaaacg ta 492

<210> 715
<211> 134
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-F2
<400> 715

cgggtcggac acgcgtccgc ccacacgtcc gcgcaaataa gaaatgctat ttggtccttg 60
gagaacttga ccaaaaccga ttgcggttat gcttctattg cggatgtcca acaacatcaa 120
cgaggagata tgat 134

<210> 716
<211> 372
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-F8
<400> 716

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agcacacttg gtggacgtca gcaattggaa attgctgagt tctcggatgc gttgttagta 120
ataccaaaga cacttgctgc caatgctgct ttggatgcta ctgaaatgat atcaaaactt 180
cgagcagttc acaatgcagc acagtcagac tctaacaagg gcaatctttc acatatgggc 240
ttagatttgg aaaacggtct gttgagggat aatttgggaag caggcatctt agaacctgct 300
atgagtaaga tcaagtctat tcagctagct acggaagcag cgattaacat cttacgcatt 360
gatgacctta tc 372

<210> 717
<211> 425
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F9

<400> 717

caaacggaaa gggtgcaaaa ctttggagtg cgtccacgat tgcagagcac ttttggcttg 60
cgtagacttc tgtagaatta gactcgacac ttttttattt tgtactttga gtagatgaga 120
gctgtgattc aacgtgtcag ccaagcttcc gtaactggag gaggaaaggt cgcttccatt 180
caacaaggta ttaacttgag acagggtttt atgagtaa atgtatggagt gccagggtctc 240
tgcgctacttt tgggcatcgc tgcggaagac acggaggaag atcttgaata cattgttcaa 300
aagacacttc aaatcaaagc cttttcaggt gaagctgaag aagaaagatg gaaaagaagt 360
gttgctgata tacaagggtga aatactgttg gtatcacagt ttacattaca tgctgcgttc 420
aagaa 425

<210> 718

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G11

<400> 718

ttctcggtag aatctttggc ttactcgtt cctatctttt ttggtttggg tttggcttct 60
tttgcggaat caaacgttac tgcagagggt gagaattttg gaaccaaag gtcgattctt 120
tttggttctt ttgcgagcat attgtccaac cttttaggag tattccactc tctgtttgca 180
aatcaatgc tttcaaagca actgtctcca ttaacactac agacttatca gtccggcatt 240
ggctgttttt tagtgtttcc cttattatta tacgattgga agttcttcca cgaattgaaa 300
gatcgacaag tcttagcaat tctcctcttc aaaggttcgc tttcatttgt acagttacac 360
gttgccctga aagtgttgga caagatgtca acagtgggtt tt 402

<210> 719

<211> 453

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-014-Q1-E1-G2

<400> 719

acacgcgtcc gcctaaattc tttgtgcatg gacaatgggt gcaaagactg ctctgagttg 60

cctcttttctc tctctcctta tcgctgccgc agttgcagcc gacgtagttt cagaggagag 120

atggggatat gctcagcaaa cccaacaaca gcaacagtgc caacaagtat gtaaacagta 180

tgcatactat cagagtccag tctgcacttc cgtaaccaca cagagcccat actggaccca 240

atgctcgaag actgtgcaaa cctttgtccc aagccagtgc agtacttata cccaatctcc 300

tacatggacc tattgcagca cctacaccac cactagcgta ccatctcaat gcagcaaggc 360

cgtgactact tataactcaaa cctgctgtgc ttatgcncaa canacttcct atgcagtcag 420

taccgagcaa tatgttcagg aaactgtatc cgc 453

<210> 720

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G4

<400> 720

gggtcggacc acgcgtccgg ggaggatgac gatgatgaga agaggcgggt ggtggttgggt 60

tcgtgcggta acaactgcaa ccacaaaaac aaatatattgg aagagagctt cgactagtat 120

ttatgacagt aaatgtgaga tgagaaaacc caattggaat acttttttgc gatcctattg 180

tacttcttgg gaacccaaac ctttagaagc ctttccgtta ggttctggca tagcctttag 240

taaaaacgtg tatatggatc ctgaacaagt tacggagcga gtattggaag ttgtgaagtt 300

gtttgaaaag gtggatccta gtaaagttca tcgagaagca gattttgaaa aggacttggg 360

attggatagt ttggataccg tagaactttt gattgctttg gaagatgaat ttgaagtgga 420

aatacctgat gaacatgccg aacagatgag caattg 456

<210> 721

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G7

<400> 721

cccacacgtc cgccacgcg tccggtatta aaaaataacg gttatcctgc agaaatagca 60
 tctctagtag taggacgtgg tgcgattgga gagaaattgg ccaaagatag ccgattgccg 120
 ctgatatcct ttaccggatc gaccaagacg ggacggcatg tgtcaaaact agtgcataaa 180
 agacttggaa agactatctt agagttgggc ggaaataatg cagttattgt tgataaggac 240
 tgcaatttag atatggcact tcgagctgtt ttatttggtg cggttggaac tgctgggtcaa 300
 cgttgcacat cgacaagaag actttatctt catcattcca cctattccac cttt 354

<210> 722
 <211> 370
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H1

<400> 722

cgggtcgaga ccacgcgtcc gccacgcgcg tccgaagaaa gagtcgaaaag gctttttttt 60
 tcgtgggttcg atgggtggat tgtgcaatat tttttgacaa tgaaaaaaat attgtacatc 120
 tactgaaatg taagaatgaa tgagaggaaa gaggtgtatg atgcaggcaa agaagtgcgc 180
 cagtagatca gagagtaaca catgcaagta ggtaaagcga acgggtgagt aaagaggtgt 240
 gaaagagtgg aagaacatga aagcacagaa gaatgtaaga aatgggttaga gtaaaaacca 300
 taaaggaagt aaaagcggga atctgagagg aggaaagcac attggaactg agaaaaagtc 360
 aaacaagaga 370

<210> 723
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-H10

<400> 723

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 attcgtcgca agtctttgaa aaaaagaacc aaaaagttca aacgtttcca gtcggatagg 120
 tttaaaagag tcaaggaaa ctggaggaaa ccaaagggaa tcgactgcag agtgcgtagg 180

cggttcaagg gttctacttt gatgcccaag atcgggtatg ggacagataa gagaacgaga 240
 cacttggtgc caaacgggtt ctacaagttt gtagtaaata atgtgaaaga attggacgct 300
 ctacttatgt tgaaccgcaa atatgcagca gaaatagcgc acggagtatc cgcaaagaag 360
 aggaaggaaa ttttggaacg agcggcggag ttggatatca gagttaccaa cgcacgtgga 420
 aagttgagag ctcaggaagc tgaatanaaa tcgt 454

<210> 724
 <211> 344
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-H11
 <400> 724

ccacgcgtcc gccacgcgt ccgccttggt gggcgactct gggactggt gcgtttgtta 60
 atcgaccccc aacctttcct ccctgttggc acggaaaggt agggggcggg ttggactcaa 120
 tttccgtgta acttctcaat tcaattgtaa taccacgctg aaaagttgag ttcgttagct 180
 ccagaactaa accgggtcag atcatatggt aaccgctcac ctggaacttc agtccacaag 240
 atcagaactt ttcgtcctca gccacaggaa ctgcttaaga gaagtgattc ctcaccctta 300
 acaatgattc cctacgggaa gtagctcaa gtaacgcttt ttgc 344

<210> 725
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-H12
 <400> 725

ggaagagatt cttttggaac ttctgtggaa gactcacttt tgggaatatc ttcttccct 60
 gtacaactta ctaccaagga atcctcatct atcatatcga gtatgcttcg tttcaaattg 120
 gctctactgg agagttttcg ttctctcaag taatactttt gtgcgtgaga ctgacactga 180
 ctggcacttc tagttccaac ataactcgca atctgtatcc agtttccgtg accaaacttt 240
 ttcaaagcta caagaaaacg ctggtgttca tccaacttcc aggcattttt gaattttctt 300
 gaactgcttt gcaacggaaa caacttatcc gtaaagaatg gaccggaata ttccgaacag 360

ttatttggaa cgtttcttgt tgtttcatca ttctgcttgt gaaacggaca ctgaccaaag 420
cgcgacaaat at 432

<210> 726
<211> 362
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H4

<400> 726

cgggtcggaa ccgcgtccgg cccaagcgtc cgggaaatcc tgttgactga cttgtgtggc 60
tatccgctga gtggaatgac aacttttgct cctaaacttg aaaccgcttg ttcaaagaaa 120
aatgtagtgt gtaagcgata aggtgaccaa cgacttgagg aaaccgagag attcccttta 180
ccacagcaac taagcatgta ctcaagggac tcgaagacag tcaaaaaacg agagccagac 240
ttagaaatca catataccat gttttggcca tgtactgtct ggatgcttgt gactcattca 300
agtacatcac aagctatcat ttcgacctaa tccgtcctgc gcgttcgttg aacacacaaat 360
ac 362

<210> 727
<211> 258
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H5

<400> 727

ggtcggtagt ccgggtcggc cgcgcgtccg cggacacttg gttggaaaga aaaggtggaa 60
ttgggtgctgc aaaaagaact ccgctaaggt caaacctcc cttttttgca aaaagagaaa 120
gggaagaagc aacaacgaaa cattcttcac gtctgcgtc ttcgctggcc aacgtgaaga 180
ataaccctac gagtggaaac caaagagaga agaccaacca aacgacgacc cctccaactc 240
agaaccctag tatgacct 258

<210> 728
<211> 479
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-H6

<400> 728

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accggtctgg gattccccgt cgcacatagt ctgagtggca gccataaaat aggttaataa 60
tttggttact ctgtttcaat acagaatgaa taggactagt tggaggtaac aaatcgatc 120
ctgagtaaat ctttcttcag ttgggacgct atcctggaat tacataaata ctagctcacc 180
tctatttcaa gttcgctga attgcacaac tttaagcaaa cataacttctt tagatgtctt 240
acagtgatat ccggtggcac tcttaagaac ggtttcccca ttgacggcaa attggaacct 300
tggattggtg aaagctgtaa caaacaccag tggctatttg tatttctaaa aggcancgga 360
gcaacggggg aagaaagggt gtcgtattct gcaactgacg ctgctgtttt tggcgtttgc 420
tgtttctccg cttgattgga cggtatcgat atcgctgga actcctcaac atcttcctt 479
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<210> 729
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H7

<400> 729

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cccacgcgtc cgggttggtt tcttggtagc agttgtacat tcaacatcat caaatgccaa 60
agggaggaaa gaaagattct tcaaagaaag aagccacaag taaacctgca gcagcagatg 120
ctacaaagac gacagaaaag tctggtccgg aagccaagtt gaagggaact ggtgcaaaga 180
aacaataaaa agttgactat gcatgtgcag tcctgttatg ttttgtgagt tctgtttgat 240
agtttccagc tattcttttg gtagtgaata aagagaaaat tttttatatt tacacaaaaa 300
aaaaaaaaaa aaaagaaaaa aaaaaaaaaa aaaaaaaaaa aaatgaaaaa acacaagagg 360
aacaagacg gaaaagcaaa aagcaaaaaa aaaaaaaaag ggggggc 406
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<210> 730
<211> 231
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H8

<400> 730

tacgtagcac gattgtccca actatgcatt tgtttcttcc agaaaagggt gctctcgtaa 60
 ccgttattag tattgttggt gcaggagttg gatattttgc atacacacag tggaatagaa 120
 agtcggacaa cgacaaatcg gacaaggaaa aataggaaga gctgatagga ctgctttgat 180
 attgtggacc agttgccttt gttgcgaata aaaaataggt gttttttgtc c 231

<210> 731
 <211> 325
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-A10

<400> 731

aacgactcac caaaatgtcg tacagcaaca aaacaaaaaa gaacacacgc gagtccaaaa 60
 ccgagtcgag tcaagaacat agttatgatt ggagtgagcgt ttgggaaaga gtgcagggtg 120
 gaggttgtgc aggaagttaa gagccgtggg cgccttgtgg gggtatagtt cacaaagtga 180
 tggacgagat tcttcaaaag gaagcaaagg ctcgagccga gggtaagcct acatacgtgg 240
 atcccaagac gggatacacg gttctcactg caaaatacct ggcgtccaca ggatactgct 300
 gtgggaactt tttttatact gccca 325

<210> 732
 <211> 278
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-A11

<400> 732

cgcgtccagt tctctggta gcagttgtac attcaccatc aacaaatgcc caacgcagga 60
 cagaaacatt cttcaagtaa agaaccaca agtaaacctg cagcagtata tgctacaggg 120
 acgggccaaa attctgggtc cgaatccaag gtgggggggaa cttgtgcaac taaacactcc 180
 aaagttcact atgcatgttc ctgttatgtt ttgtgagttc tgtttgaaag tttccaccta 240
 ttcttttggg actgaatacc cacaaaattt tttatcac 278

<210> 733
 <211> 294

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-A12
 <400> 733
 aaccactctt ccgcccactt cgtccgccga caccaagaaa agaaacgaca catatatcca 60
 caaagtttct ggtcattcct taattgggtt aacagcagca ctctatacta aataggagac 120
 ttccaaatat cgttcgaaac ctaaaggggg ggaactgatg aaaccagaaa ccttgatttg 180
 gaacatacag cacccaaaca cacccaatcc attacctttc aaatcatcca caccttcgta 240
 tagaaatcca ctttacaaca acaactttct taaactgcac tcgatcacga ttcc 294

<210> 734
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-A5
 <400> 734
 gtccacccac gcgttcgaac gctacatcaa ggaaggaacc cgcacagct atggagagaa 60
 aacgaggtcc tcttcgttcc aaagctgcca ataatgttaa aaacgtagag caaaagaatg 120
 gcgtccatac agaatagaga gataacggag tctcaaaggc agagatggaa aagctttctc 180
 aagaacatga ggaagaaaga ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga 240
 aaaaactgag tatcaggaag aaaagaggga gtagatgagg aaagaaagat caaggaagta 300
 agagtaatat attgattaat gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa 360
 agcgcgtacc ttttgcataa tgtccc 386

<210> 735
 <211> 167
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-A6
 <400> 735
 aacagcacta actgtgacat tgcagtaaac taccattatg attgggtcag ggatatttct 60
 tgactatata ggtggaggga ggagagagat ccatcaatta catcatgtgt ggtaagatat 120

tacagaccag tgccccccga taaggaatct aactgagtaa agaaaat

167

<210> 736
<211> 344
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-A7

<400> 736

cgtccacacg ctttttgaat tgcattgttt ttgagatcac cccaacactt gtacactaaa 60
tgaacgacgt atgggtacta actgtgcatt ttgtatagat atcaaggagg tcaaatgggt 120
tatcaactac gatttcccg ggactagaga ggactatgtt catcgcatg gtcgcactgg 180
tcgtgctggg gcccttgga agtcccatac gtttttctact ccggataaat tccgtgttgc 240
gaaagactta gttaacttgt tgcgacatgc tggacaggac attcctcccg agttggctcc 300
ttttattttt ttttcgtcct ttggcggtta caacacaaac tttt 344

<210> 737
<211> 353
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-A8

<400> 737

tgaccacggt atttacaaa caaactcgaa cagttttggg gccaggctcc accaagttga 60
tttatogaag tgccgcggta ctcttgcaa gtggccaagc acttccagaa cacgggttga 120
agccacttcc cccaccacc agttaccac atcgaaaaca acccccgagg cgaccccccc 180
cccctcctcc acacgcactc acctaccaa aaaaaaagc cacacctccc tttttttttt 240
tctacccccg cgacccccac caccctctc cctcgcccc aattccccac tccccactt 300
cccgactctc accccgcac ccacctccc ctttaccoca cgcccccccc ccc 353

<210> 738
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-A9

<400> 738

cacgcgtcca cgcaatcggt ccacgaacga gaggggttct aaatgacttt gcgcaccttg 60
cagttttctt tggacttgct gttggtgcgc ttttttttgt ggcactgtcg acgctgagtt 120
gtttctagaa agaacacaag gccttgttta ggggaactga ctatttacct tcgaagcact 180
ttacaaggac aatggagact acaaacaggt caggtgcagg agactttact tacagggagg 240
ctccccctca atggcgccat gactctttca gctcaagggg tggttcctat tcgctcgata 300
atcatagctg gtttctttct aacagctttc actcatattc acgagcaagc acggaaccgg 360
ctgcctatcg aagcgtggcc ggagtttccg ctaacgctaa ctttccttcc t 411

<210> 739

<211> 231

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B10

<400> 739

agcaaactgc cctctattag ggcagtgcga aagattaccg tttggggcat ttttaggcac 60
ttttcatttc ctccacgatg aacgaaaaat ttgaatatat tcttatatgg cggtaggaga 120
gtggcatgga aaatTTTTGA aggggggcta caaggtatta acaggaagaa accttccaac 180
ttccaaaggc ttaaattgct tttcccaaac tgaaaacccc cccttaaaat g 231

<210> 740

<211> 243

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B12

<400> 740

aggacaagag aacatgcact tctggcttat accatgaaag tccgtcaact aatcgtcgct 60
gtgaacaaaa tggatgacaa gaacgtgaac tggtaaagg accgttatga tgaggtttcc 120
aaagaaatgg acctttactt gagagggggg cggtataaat ccaccaagg ttccaaagat 180
cactgtatct ggatggactg gaaataacct ttttgagaaa ttccctgcc aattatccct 240
tgg 243

<210> 741
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B3

<400> 741

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cccagtcgtc caatggagtt agtgcagagt aagcagacag cgatatgtta ggattcacag   60
gtctggggttt aaaaaatgag aaggatatta ctatcaaagg tttggaagca gtgaaaaatg   120
cagggtttggg ggttctggaa agctatactt ccgtgcttgg aggtagtaga cagtccttga   180
gtgtattttta tggaaaagaa gttatggcaa aaacacgtgc cagcagcagc ggtaaaacgt   240
gtgtagcaag cgtagagcac aagaactggg tgtaaaggtc gagtagtaca gtaagtgtaa   300
aagggaaagg aaaggattat atttatatta tggatgaaat gcagagatct ctagacaaag   360
gcaagaaaga aaagaaaaga agacacacta aatgaggcga gaaa                       404
  
```

<210> 742
 <211> 198
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B4

<400> 742

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acgcaaccgg gaaatattgt tggaactgga aatctggaat cccgctgaag actcctaaac   60
actcaaatca gtcaaggaac ccaagcatga gcccaacaac atgtatgcgg attgggttct   120
atggactgct ttattcaggg cttctgcgat ggttaatttt attgcattat aaacggatcc   180
aacatgacgt attcttac                                     198
  
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<210> 743
 <211> 316
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B5

<400> 743

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gtccagaaaa gcgtgtatag taaagagtat taatggtaac ccaaagcata agaaaaataa   60
  
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agcttggcag ccaccaaacc ctgcagaact cggcaactgg attcataggg gaaatggaca 120
 cggttggtgac gtatggtagg gagaaaggga gataataaac ctctttcaaa ggggaactgg 180
 ctttccaaga aagaagccag taatttttga aaaaaaaca ctaataaac ccacaaaaaa 240
 ggaaaccccc caacaaaaac aaaaatctaa ataccacact aagaaaaacc caccacacgac 300
 tccttttttt tttttt 316

<210> 744
 <211> 307
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-015-Q1-E1-B6

<400> 744
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 caccaccaac ttccgccaca agtgctcttg gtgctgggac ttctgctccc gtcactacag 120
 gggttccggg cagcgtaacc agtgcaccaa tctctacagg aattccaagt ggtgttataa 180
 ctccacgaat tccaactggg gttataaata caagtgttcc gactagtccc cctcgtgttc 240
 ccaatggagc ttctattata aaaaaacaag ctgcctacat ccgtatattt ttttatctca 300
 aatctcc 307

<210> 745
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B7

<400> 745
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 attttttagat agccgcagaa gactcttcca tctcgaatt gctaccagtc gcctcggggg 120
 tctctaaaag acgctgctgg tgatcggggg taatacaagc ttgagtgatg ggctccaaat 180
 ctcttgcaa aaagctgtct aaagagaaat tcatacccaa acgatgggtc gtcacacgtg 240
 cgtccttata gttgtaggta cgaatctttt ctgcacgggc acctgaacca acctgactac 300

tcctcattct tgtattggct tcctgttggt cctttaaacg catttcatac aatttggcac 360
 caagaatttg aaaagcacgt tccctattct gtaactggga cctctcttct gtgcaaaata 420

<210> 746
 <211> 298
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B8

<400> 746

acctggaccc ttatgacctg cctaccccc actttgatct tggcatctgg caatattcca 60
 ttcttttttt tcgagatccg gtgcaactat tcaaaaatct tcgcaactcc ttgggttccta 120
 aactggaac cccccccaca cttacacggg caccctaaa acaatatcag gtgcttcccc 180
 cccccccac gtttctgca cccccccaca aaaaaaaaaa ccctcaccat catttttttt 240
 ttttttatcc accctacca cccccatcc accacgacac accaccatt ccctcccc 298

<210> 747
 <211> 115
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-C10

<400> 747

cacgcgtcca agaattaatt tcaacttttg gttattgctg ctaaaaaatt tcgtcttgaa 60
 actacttttt ctaacaacaa tccaatccaa attaagggcc atttaaaggt ttccc 115

<210> 748
 <211> 109
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-C11

<400> 748

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 taacacaata taaacaacaa aaaaataaaa tcaacataac cacacaatt 109

<210> 749

<211> 368
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-C12

 <400> 749

 aaggacacgt gggctttgtg cttggacaat ggtagcaaag actgctctga gttgcctctt 60
 tctctctttt cttatcgctg ccgcagttgc agccgacgta gtttcagagg agagatgggg 120
 atatgctcag caaacccaac aagaggagca gtgccaacaa gtatgtaaac agtatgcata 180
 ctatcatagt ccagtctgca cttccgtaac cacacagagc ccatactgga cccaatgctc 240
 gaagactgtg caaatctttg tcccaagcca gtgcattact tataaccaat ctctacatg 300
 gacctttttt ttttatttac acaccactag cgtaacatcc caatgcatca aggccgttac 360
 tacctata 368

<210> 750
 <211> 238
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-C4

 <400> 750

 gtagttcatc aaagatgaga caccacttca atatggtgta agtgcttctc tttggactgt 60
 tcgtctcttc ctctacacag ttatttttagg attctcggcc actatcattg gcttttatgg 120
 gggtaaagga gacaacatat ggaacgacag cttattctat gatgggaagt acattaactt 180
 ttgtgcttat tctgcctctt ctgttgata acgacgggat cactgaccct gtaaatat 238

<210> 751
 <211> 391
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-C5

 <400> 751

 cgtccacca cgcgttcgcc cagcgtccg agcacagtaa acacagaagg ggacaaaaaa 60
 actaagtttg ctgtcagaaa ggtctattca ggcaactagt gcgcgaaacg gttttctcga 120

gacccctaaa tgaaggacaa tcgggtccgg ggtcatcttc caaaaatacc ccacaaagtt 180
 cttcttccga gaaagttcct acttggaagg aagtgatgga ttccacggca accacattgt 240
 ttgcaacgga aatgattcga ggacttatga tgacccttca gtatttcttc caaccagcgg 300
 taaccctcat ttttcttagt gaaaaaggac ctctttctcc tcgttttaca ggggaacatg 360
 ctcttacaac atatccatcc cgacaggaac c 391

<210> 752
 <211> 362
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-015-Q1-E1-C6

<400> 752

cacgcgnctg aaggcggcgt caaaatagag agcccacccg agtagaagaa aaaagagaga 60
 agaaagaaaa gaagagaaaa gccgtactga agaccgacac aggtactcgg ggagaaagga 120
 gacccatttt aaggggagag agtggacgat aaggaactag gcaaaaggat atgggtatctg 180
 cggtagaaca tatcacacaa gcagcaccga ctgttttagca aaaacacagc actctgcaga 240
 cccacacca tgtaaagtat acagtgtgcg gcctacaaaa tactacagaa caaatcgatg 300
 atttttattt ccagtaccag atgacgtata gagaatggcc gtcctaactg taaggatcca 360
 aa 362

<210> 753
 <211> 287
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-C8

<400> 753

tgacaaaaat agagatcaac ttttttttaa aaaaaaagaa atgactggag ataagtcac 60
 tcaggaccag gcgaacgata ttggggccca ggcacgggac cgtattattt atgggggaac 120
 tgggatgaac gaaagtgtc aaaatgcacg ggacgccgtc aaggacaaga tgtccccccc 180
 gaacgagtcc gtttccacca aaaaaaaaaag tctgaaggac gccccccca cctagatact 240
 ccgaggtcat ctcaaaaata acatcctgtc cgcgtttatt ttttttt 287

<210> 754
 <211> 60
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-D10

<400> 754

gtggggcaga tgatacacat cgacaaacaa aaacactttc ttctctcaca cgaagacatt 60

<210> 755
 <211> 353
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-D11

<400> 755

acaagactag gaaagaggca ttggcagctt atttagaaag caaaaaaaag gaaacgagtg 60
 aagtggaaca agaagttgca caattaaagt cttataatga ctctgctctc aagtcaagtc 120
 ggggggcttt ggatacagct tatagtgaat acgggggagag tcacaggcag ttgtatcaag 180
 aaaaggaaca aatgaacgac tctctttttac aaagtattga actgccaaact atgttcaaca 240
 tggaaattcc ttaaaaaatt accttttttaa acaacaaaat ttggaaaagt cctttaattt 300
 gtttggcccc taatcttttt ttttttttaa taaaacaaaa tttgtaagtt ttt 353

<210> 756
 <211> 89
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-015-Q1-E1-D2

<400> 756

tгнаacctct tcaattcttc ttgcttcaaa aggagggtcg cagggtttttt aangtnnatg 60
 ctggtnnnnn ntttggttct gttentctt 89

<210> 757
 <211> 387
 <212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-015-Q1-E1-D3

<400> 757

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agtggtattcc taaaaaggga atccgngaga atatgtgtac accttggcta gacttttttag 60
tgaacaatat gtacgaagac cttcgagctt tggccagggg gcaagcggaa gatcttcaaa 120
ggggacaggg tgtgcgcagt cctgtgagta cagccaactc aaatacgaat tctcagacga 180
ctccagctgc atcgaatgat cagaatgaca accgttctca agcttggcac acgcagaaca 240
gtgtacaaac tttggacgct gaacaagttg ccaaacaac gaaaatactt cttttctatt 300
ggttgccacg aggtgaactt gcacgtcgca ttcagccaac taccgatgca caacgtgctt 360
tccgtatccc gattattctt tcctcca 387
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<210> 758

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-D5

<400> 758

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cgtccaacca cgcgtccgca agaaggtgtt acacggggat cccagaacg tgctgtgaaa 60
tgagagaacg tacgagaaag ccaagtgagg aaaagaaggc aagtacaggg cggcccggga 120
aaggagaggg cgtaagacgt gagacacagg gggaagaaaa gagaagagag ctagaaagga 180
ggtaaaagaa gagtaaaagg actagaagag gtacggaatt cacgaggaag gagcgtgaag 240
gaaggaggaa tcccaagtaa tcgaggaaga aaaagcttcg gtgaaagcgt gaacggattt 300
tgtacacact gctctctcaa gttctggaag tgtgctagga ataagcagga gaagtataag 360
agagtaggaa aagaagaaag gaagtgaaca cgtaagacgt gaaaaaaaaa acaaaagggc 420
ggccg 425
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<210> 759

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-D7

<400> 759

gtccagaaaa ctctggttgg ttcgtcatgg tgagagaacg caccacgtgg accaagaatg 60
gaaacaaaca gcaaagaacc cttacgatcc tctcttcacg gaaagaggcg accagggggc 120
gagagagttg gcatgagagg gagcagggga acgagtagag gttatcattt cctctccttt 180
ccttcgatgt gttcaaacag cgagcgttat tgcaccaag tgcaagcttg acatcaagat 240
tgaaccacgt gctacagagt ggctaaatga agagtggttt ggtcccacta ttcctgagtg 300
gaagactttt tttttctgc acgcacagtt tccttccgta gatgttagct atcaaccaat 360
ctccgtagca aaaacactca gaaacgcgtt gttctttgac ggaaagag 408

<210> 760

<211> 388

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-D9

<400> 760

ccacgcgtcc acccagcgt ccgaacgcta catcaggga gaaacaaaca tcagctatgg 60
agagtaaacg aggtcctctt cgttccaaag ctgccataa tgtaaaaac gtagaacaaa 120
agaggggcgt ccatacagaa gagagagata acggagtcgc aaaggcagag atggaaaagc 180
tttctcaaga acatgaggaa gaaagaggca aatacgggaa agcagtataa gaagaaagag 240
aaaggaaaaa actgagtatc aggaagaaaa gagggagtac atgaggaaag aaagatcaag 300
gaagtaagag taagataatg atttttgtga atgaaagcac gaaagtattt gaacaagaga 360
gtgtaaagcg cgtacctttt gcataatg 388

<210> 761

<211> 300

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-E10

<400> 761

cgcgccagt tatagggtcc agctcatatt aacatactca aaaaaaaaac ttctgttgct 60
gaaacttttc ttggtataca tttgggctcc tcttgcatcg gtttagccat tgcacaaggt 120

ggggagtacg gtaacttttc cgtattcatg ggggggaaga ctctcccctt tgtctttttg 180
 ggtaactcct catactttcc cagcgctaac gccaaaattg ccctaacggt ccactggttg 240
 taaaacgttt tcatgaaaac cgtacctttt ttaacacaca aattcatagc tgcttaatct 300

<210> 762
 <211> 52
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E11
 <400> 762

aaccacactt ccacgaaatc tattttcgta acctaaacac aatttcatat cg 52

<210> 763
 <211> 309
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-015-Q1-E1-E6
 <400> 763

ataaaaatgg taggtggagt agtagtgant catatgaaag aaggaatgga gattggaang 60
 agggattaca tgaaggatgt tataggggga taggggataa ggtggatata tatatcgata 120
 ataagtgtga tagtaatata aaggacccca aagagaggaa agaggtgtat gatacaagca 180
 aagaggtgac gcactccatc acagagtaac acatgcaagt aggtaaagcg aacgggtgag 240
 taaagatgtg tattttatct aacaacatga aagcacagaa taatgtatga catggttata 300
 gtaaaaacc 309

<210> 764
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E7
 <400> 764

gtccatgcgt ttcttgagct ggtttggttt ggtgaggagc ctagtctgct tttcgaaaaa 60

tgaggtgaag aaggcgaggt tacaagttga gcagcagaat cttgaaaggc acatggggca 120
 gttggattgg ggaaagccgc gtgaagggcg tccagagatg acctgggaag atattgaagc 180
 acaagtagag aagggtttat atcttggtgt tatcgatgga ctggtatata acgtgaccga 240
 ttttcttccg agtcaccctg gtggtagaaa gatattggag ttctggaacg gtcgcgatgc 300
 tatccgtttc tttattggag aagtttatcg tcatagcaag gctgcaacga atttgatcgc 360
 acatattcgt tatgcaaagt tggttgagaa acttcaatac tgtattgggt tgtggttaac 420
 cagggcattg tttgc 435

<210> 765
 <211> 381
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E8
 <400> 765

gtacttggtg cgggtctatgt gcacttgccg agatcattgc attgataatc aataaagtta 60
 ttccggtatt taatgacctt cttggtttag tagcttcatt ggggtgcggtg acaatttact 120
 tactgtttgt cgggggactt gtggttattt gataattatg ggaagtggcg tatacatccc 180
 atcttgacag ttcccacctt acttgtgttt ggacttggaa aaactattct tgggtcttccc 240
 ccctatgctt cagtgaagag catcatagtt tacataaaaa ctggtcaagc atgtattttt 300
 tttttctgct cttacaacac ccaacctgga gcacaatttt tcgtcacaag tgttgtggga 360
 aaataaactt tgtctgcctt t 381

<210> 766
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E9
 <400> 766

ccacgcgtcc acggacgcgt gggcaattgg acgtttggaa aaggatacag aacggataga 60
 gtccgcactt gaaagagcta aactttcggc aatggaagaa aaggaagagt tcaatggtgc 120
 tccgacgaaa gcagtgccta cgcagaatag ctcaggggggt agtgctccgc ctccaccagg 180

acctcctcct ccaaccttgg caaaaacaaa ctccgattac gaaccctcgg aatcttcagc 240
acattccgcg ttgtttgcag ccatcaactc agcacgaacc gacatcacca acaatttgaa 300
aaaagtgacc aaggcatatt tttttttttg ttacacgtca caggaatcca aagactcact 360
gccttcctaaa accccagcca actca 385

<210> 767
<211> 343
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-015-Q1-E1-F11
<400> 767

aaggacgcgt gggctggcaa catgctggaa tgtatcaaat ggtaatttgc tactttttat 60
ggagccgtaa ttggtaacga attggaaata tcaagagagg ttgtttcatt cggggggagt 120
gtagctctaa tatggacttg aaggagagaga tgagttttcg tttttccgcc tggttctcga 180
ctcctgttgg tacgacaact tgagtagctt tctctccttt tgtcaaagca atcttcttgt 240
tcttcttgcg tccagtcttt tgttcgcaat tagcctgctt gatttgtttt ttaaaaagtt 300
acattttttt ttatccgcc ccaactgttg tgttcccttg aac 343

<210> 768
<211> 375
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-F12
<400> 768

acgaacgcgt gggatagcgt gatatccatg gtcactaaca tagcaacttg tcattccgtg 60
acgatagaat actaccccgga tatgttaaag gttatgattc ccttgttcaa aagtgggtaca 120
tcagacttgg aggcttggtg tcgtgtgacc tacgagaaga acagcaacaa caactagtat 180
gctttgtgat tcaacgacac aaaacacat ggaaccacc ggaagaaaag ggaacctctt 240
gggatttgcc ttatgaccga tgtctactag gcgcacagga aattgcgatc gaattggatc 300
cctatttttt attttgcntt gaggggtgcgt gttcccatc atgtgatgag gactactaac 360
aatcgtagca ctgct 375

<210> 769
<211> 261
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F3

<400> 769

acttttctaaa aaacaaacgg agcaattaat tcctagaata ggttatataa gaaagtacca 60
acatctactt gctgaatact ttaatctgtg ggcaataggt gttggtaaag atccatttcg 120
aggattacgt atttacccta catatcttagt acagtttttg atactaatat taattttatat 180
taaatttcaa ttaatattag tgaatataat catatcatga tattaacacc ccgaaaatga 240
attatcaata aaactttaac a 261

<210> 770
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F5

<400> 770

cgtccaagtc agactttgac aataaccagc aaaacttgga tccaactagt agcgtgttaa 60
atactggaaa tgaccattt tctactagcg aggaaagcga gtcacctagg ttggacgtgg 120
gtcacttgga cagaattaag cgtttgagga gtgcacctgc gttgggtgtc tatgctcctg 180
gttatggaaa ctgccagaa tatgtgttg cggaagacta taccgactat cgtaaaaagt 240
cttggggaga acagtcctg tattggacag gagtttctta ttgactggg gcagtgactg 300
gtgggttcgtt ttttctccta taacgacttc gttcttcacg tggcaaaagt tggaaactac 360
gagttaatgc cactttgaat gccaatgggc caacaggagc tgcattagct aa 412

<210> 771
<211> 251
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-F6

<400> 771

gacagagggc atggcagggg tgtcacgtgc aaagcttcct ctggggacag gggtgagggt 60
gacgaatddd taacgggcan aggggtgtac cgtagtcct ttgagtgcg acaacttggt 120
cgdddgggt gccacccctt ttggccccc tgatactgcc taaagaacga ggtagggtacc 180
ccccccacc aactdddtagt gaacagtatc ctgaaaaaac acccagggtc cgtcttactt 240
gttdtdtdtdt c 251

<210> 772

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F7

<400> 772

gtccagaagc aatdddcaac ggccaacgta tggatgcaac acttcctacc atcaaataaa 60
tattagaaaa aggagcaaaa agcatcgtag ttcttdccca tttgggtcga ccacagggaa 120
aagtggacaa aaagtattcg ggaaaacggg taccggaata tttacaacag cggttgggtc 180
gaccggtcgt ctdtctggaa cactgtgtgg ggcctcaagt agagcaagct tgtaaagacc 240
cggcgcctgg atctatcttd ctatgtgaaa acttacgttd ccatgtacaa gaagaaggaa 300
aaggagttdt ttdtattgga aacaagatca caggaacacc cgaacaaata gaaacattcc 360
gagaaagtct taccaa 376

<210> 773

<211> 225

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F8

<400> 773

aggaacacac agtaaagag gcgagaaagc atacgaagtg attgtggatt aggagcccggt 60
gtactctatt tattagggga aagggggact aacaaaaaag ggactcattc caccaccgga 120
gtaaacgcgc aagaccccc cccaaagcac ttcacgcgaa tcaaaaaaac ggatcccatg 180
caccctccc tacagaaacg cacgcaccac cctaaacgaa aacac 225

<210> 774
 <211> 97
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-G10

 <400> 774
 agtttcaaac tgtgttgta taacaaagac attttgcctt gtatttgata cgacttttaa 60
 gttttcaaaa attccttata caaggtcttc taccgac 97

<210> 775
 <211> 236
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-G11

 <400> 775
 aaatatccct agctaggaac catggttttc gttaagaggt gttaaaatat gctcgttctt 60
 ttgttcctta tagaactttc caaggaagca gtgaagctac taaatctaaa aggcgtgtga 120
 caaaccaact ttctggcctt tcggcgggaa agcattccca aagtgcgtct gacgctcatg 180
 aacacgttga catctgcaac tttgaagcac caaacggacc acaatggggc agtccc 236

<210> 776
 <211> 267
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-G12

 <400> 776
 cgcgtccaga aagaggcaaa tacgggaaag cagtaacaga aaaaagagaa aggaacaaac 60
 tgagtatcag gaacaaaaga gggagtacat gaggaacgaa agatcaagga agtaacagtg 120
 ggagagggac taatgtgaat gacagcagga ggggggggtga acaacacagt gtaaagcgcg 180
 taccttttgc aaaatgtccc acccagtgac acaggaagca caaacaacc acaacaagta 240
 gccacgtaag acccgaagcc acttgat 267

<210> 777

<211> 311
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-015-Q1-E1-G3

 <400> 777

 aaatgacaaa tacncttctc aacttttcta gacaggagca acccgttact ggagtttaac 60
 aagggacaac gactttctag tagtggtgct ttacaatttt ggaagccgga gtgcggttca 120
 aaccagtttt gttcttttagg cgctctgggg tcgaatgaac aagacatttc tagtacgaac 180
 accgacatga gagtatgtat tgaaagagga tatttactgg agttgatggg tgagggattg 240
 tctgtttgta tgccttgggt tatctcgaa tatattcact acttgaggga gactctacag 300
 tcttattttt t 311

<210> 778
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-015-Q1-E1-G7

 <400> 778

 gtccaaccac gcgtctggga gaagatatat gatcgcaatc cctttgttta ggaacaaaag 60
 aatacctaga gacagacaca aaactattac ctacaggcag aattctgggg gccgagtcta 120
 aatcgatatt ggacttttagg gaataagggc tcctaaaggg acctcctaaa gaatagtctg 180
 gaataacaaa tggctatgat cacttttttg tgttcgataa gactggaccg aaatcgatcat 240
 tacaatggat gactacagtt cctcatgcgg agtctaaaac aactttgaaa ctctatacct 300
 attatttttt ttttataatt ttacaccgc acgtttcctc aagcctcaac tatgtttccc 360
 tatcatcact tccaacgggt ctgttttaaa ccaacttget ttatccacc accctaccat 420
 cc 422

<210> 779
 <211> 328
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations

<223> Clone ID: LIB190-015-Q1-E1-G8

<400> 779

cgtgttgcg actatgctgt tncggttcgc gttctgtggg ccgggtccgg tttntctctt 60
ttttctgggg ccctgtcnct gccccggtt tgtgccctcg ctgtggccgc ggcggtgcgt 120
ttccccctt ccccggttgc ctcccgctt gttgttgcta ctgtgggacc ttccccctct 180
tctgcgcccc ttcgtgctgc gttagcaaaa agtgctgacc gaggcataca tttttttttt 240
gaacaggagt tgccccatc cgtcgtttca agaccttaa aggggattgt actaaaggac 300
aaaccaagtc tactaatatt aggaaaac 328

<210> 780

<211> 303

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-G9

<400> 780

aaaaaaaaa gcctacattg ttgccgttgc tcgaacaact ataggatcgt atggtggagc 60
tctgaaagac tatacagcac cgcaacttgg aggaatagcc attcgaagag cagttgaagt 120
atctaaaata gacaagagta agagggggga aatatatttc ggtaatgtgt tatccgctgg 180
tgttgacag ggcctgcga aacaagcttg tatggcggca ggtttagcgg atactattcc 240
ttgtactaca gtaaacaagg tgtgctcttc aggtttaaag tcgacggtgt ttggtgttca 300
atc 303

<210> 781

<211> 270

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-H10

<400> 781

cgcgccaac caagcgccg ccactcgtc cgggacaaca aataaaaatg ttggccttcg 60
tgtatggaca aggcggttgt atactacaac aacatcaaca acactcttta caaacaagag 120
ggtgtttcct acgaaaccaa aactattttg tggggaagaa taatgctact gggaaaaaca 180

caaaaacagt acttttcaaa agacgaaaac acgtattaac tgtacacacc actcatgtcg 240
acagtctacg ttgcacaatg gaacacaaaa 270

<210> 782
<211> 353
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-H11

<400> 782
aaccacacgt ccgcgccaat ttgtctagag agtgattata tgtgtgttgg ttggtttctc 60
gtattttcgt gctaggaaaa agatgcaagt accgagatat caagggtccag caggggatgt 120
attgaaacga gatacttcat aagggggggg ggaagaggct cgaatgtctt ccttcattgg 180
ggctttatca ctctgtgact tggtgaaaac aactctgggt ccaaagggaa tggacaaaaat 240
acttcagtct gcaagcgggtg atatcattgt gactaatgac ggagcaacca ttttgaaatc 300
agtgaatatt gtttatgctg ctgcaaagat tctagtacat atatcaaaga ccc 353

<210> 783
<211> 100
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-H3

<400> 783
acgcgaccgc ccacttgtcc gccacgcga taaacgggaa ccccggtttc taccgttatg 60
ctcttacctt cgcgactcgt ccattctttt gtgtttgttt 100

<210> 784
<211> 381
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-H4

<400> 784
tgcaaaagtt gtggtcgttg ttatgtagaa atgttgacta cccatacaac aagaaaaata 60
ttcaaacatt ttacagtgtc gcatataatg cttctcctta tagagagctt tttggagaaa 120

gaaaggaacc ttttggggga gatcggaatg aacgcataca aaatatatgg gaaaaccttc 180
ctcctgcaac aatggaaagt tacttgaaca cgtcttggtc ttgtaagaaa agtgaacaaa 240
cccaaaacaa gttagatctg gcaacagaga atatatgtga tgaagaagga aatcctctcg 300
tgtttcatat gtacgtgacc gtttacaacc aacttaccga catacttaca gacaacggta 360
tatactgtgt tgaaaccccc g 381

<210> 785
<211> 356
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-015-Q1-E1-H5
<400> 785

cgtccacaaa attcttcata atgtttgcaa atggaaggaa gctcgtttta atttagaaaa 60
aaactgacaa cttctcccca gccgtcagtt tacggcttgt acagcgaggg gaataggggtg 120
gtctttcgta caatcgctca gttttaaggc atgtttgagg tctgctctta tatgtgcctt 180
tcgatgtgca cttttcactc ttgctctggt tgaccagcgt attgatatca atccaggagg 240
caatacgcaa gcggtttgtc attgttttga aagttgtcat taagtaccga atcgtgataa 300
tgattccatt ttgtatgcgt acattcaaac ccttggttatt ttacagagg attaca 356

<210> 786
<211> 140
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-015-Q1-E1-H6
<400> 786

caacacagtg tcaagcgcgt accttctgca gaacgcccc cccactcaaa caggaacccc 60
acccaaacaa acccacgtag ccccccccc ccccaaccta cttgatccca cgctgtccaa 120
cccaactacg gccgaccac 140

<210> 787
<211> 163
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-H8

<400> 787

gtccacacaa tctttgagac ctcagcgaat cactcgacac ccaagtcgat cgacaaaaac 60
tctcattgga gcacttccat ataataggaa gatactctgc agacttcagt tcagggtgca 120
acacacagaa tttctcaggg gttcggggac gtccaagaaa ccg 163

<210> 788

<211> 441

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A11

<400> 788

acccacgcat ccaccacgc gtccgtcacg aatgtaaacc aagaaaaagt tgtttgaaaa 60
gaacaaggac atataggtat tttgtggaaa agtccgtcgg gggagttgac agaaatattc 120
gtggggaaga gaaaccaaac aaagaagacc aggaggtgca accccttgaa cctttatttc 180
agtatgagct cgaaaaggaa ggcgcttgca ctggaaattt catggtgttt agcaatgaca 240
acttgtcttt ttgttgtttt gaccctaaag aagactcgga atgttggtgac aaggattgtt 300
tggactccaa gaccattatt atccctatgg gctgctctct gtcaggcgag gtattcttgc 360
cgtttcgttc cacatttggt tcctatagat gtccgccttc acaagtacct tgtctcactt 420
gtgctcgaaa cgcgccgcta t 441

<210> 789

<211> 229

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A2

<400> 789

aggcctccaa ccacgcgtac gccattcgt ccgaggaaca aaactgacgt aaacgctgtg 60
gaagccttac attgggctaa catgtgcttg tactccttca atatcttctt ggcctttttg 120
ggataagggg ttcgtggaac ctgtggctgg ggtcctaggg ttgcacacta tcgcatgttg 180
acctctgtgc acaaagatcc aactttgtcc aaaggatcgg aaatgcac 229

<210> 790
 <211> 282
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-A4

 <400> 790
 aggccctccac ccacgcgtac gcggccgcgt ggggaaagag gaaaatacgg aaaagcagta 60
 aaagaagaaa gagaaaggaa aaaactgagt atcaggaaga aaagagtgag tacaggactg 120
 ggggaaaggt gaacggcgga agagtaagag agggagtaag gggaatgaaa gcaggaaact 180
 atttgaagaa gagagtgtaa agcgcgtacc ttttgcataa tgtcccagcg agtgaaagag 240
 gaagcaaaaa gaaggaaaaa gaagtagcca cgtaagaccc ga 282

<210> 791
 <211> 306
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-A6

 <400> 791
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 gttgcttcag aaatttatcc aacctattta cgtagtcacg gaatgttgct atctcatgtt 120
 agaaacttga cagggagggt tattactaca tgggcattcg gacatatgac caatgcaatg 180
 acgaatacag gtacctttgt tggtttctat ggaggtctta ctattctcgg ttggatgtat 240
 ctcatgttct ttatgccaga caccaaagac aagactctgg aagaagtggg tgaaggattt 300
 gaaagg 306

<210> 792
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-A7

 <400> 792
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cgagattatg gaagattggt ggagaatcat gtttggatat tcgggaacga gagaaagggg 120
 actgcttggg agacgtgcaa gggaggagag gttgtacggt attgtgcatt ttggagaagc 180
 ggaattggtg atgcaagtgg aaagatgttg gggaattggt tcagcgatag atgtgtgttg 240
 gaagaaatat ccgaacgaat gttatcgttg gatgagtatg tatgtggggt tgatggagat 300
 atggtggctg acgatggaag cgtgngcggg gggggggggg ggggaggcgt tgatttgtgg 360
 aagtcgttta cgagtccatg ggaacgcaac gagattgatt ttgacgccgg aaaacatatt 420
 ttgtggcgat gttt 434

<210> 793
 <211> 117
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-A9
 <400> 793

accactaat ccaccgacgc atccgccgtc tactcttcca aatcaacaaa ccatcccca 60
 ctctcaaaat ccactacact accattatca ctgaaacacc ccatcactct tcaccac 117

<210> 794
 <211> 289
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-B1
 <400> 794

ggaatcattc caccagggga gtanngacgc angaaagaaa cccaagcaa ttgacgggaa 60
 tcggaaaaag ggggtggatca cgtaaattaa tccgatgtgg accgggaacc tgagctctcc 120
 aggaaggtgt tgcacggctg tcgggagAAC gtgctgtgaa gtgagagAAC gtacgagaaa 180
 gccaaagtgag gaaaagaagg caagtacagg gcggcccgag aaaggagagg gcgtaagacg 240
 tgatacagag tacgaagaaa agacaacaga gctacgaang gggtaaaag 289

<210> 795
 <211> 356
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B12

<400> 795

cccacgcaac caccacgcg tccgccacg catccgtgtt gataataaaa ggcgtaactt 60
tgtgggtttc cttacaaaat gtcttttata tttcgtggaa tcaaaggcct ttccaatccg 120
ggggatggac aaccctggga ttaccacc ggggggaatg tataccttga accagatgtc 180
gtacattgtc cattttgctt tttctgttgt actcattgct atgttctccc aagttacctt 240
ttatctatac cgtgacttta agtgtgcttt cgatgggcat tgggattact ccacgcata 300
caaactctct gctttttttt tttattctct tacctcattg ctttggagat catttc 356

<210> 796

<211> 99

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B2

<400> 796

acggcgaaag cacttttgtt ctgaaatggc cttgtcgtga ccaatcgata caggtacaac 60
tctgagcggt ttccaatgcc gtttgttttc catcctctg 99

<210> 797

<211> 242

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B3

<400> 797

cacaaagaag gatcgtgaag gaaggaaaaa tcccaaataa tcgaggaaga gaaaacttcg 60
gtgaaagcgt gaacggattt tgtacacact gcccgtcagc ttcggggact gtgggacgag 120
ggggcaggag aactagggga cagggggccg ggtggagtag cgaaccagga gaagggaagt 180
caaaggtagg aaagaggaaa gggtttacgag agaaggaagt agacagaaga gactgtaagg 240
cg 242

<210> 798

<211> 292
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-B5

 <400> 798
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 aagactgggt agcaggaaga acgataacga gttctcatgg tgaaccgagg gaaggggttc 120
 aaggggaatg agaagaagag gaagaggggt tttctacgga tgatcaaagt tccgagtcgg 180
 aactttatga ctcagcagtg gaagaagcag caccaaaaga attggatatt ggagaaaact 240
 actatcaaag agacgattta taagaaggct cagagtatga ccaggaaact tc 292

<210> 799
 <211> 205
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-B6

 <400> 799
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 tacggaaagt gattctatag agagaataga gcatttcgtg attcgttcga ggaaaatggg 120
 gttgacggtc ggcttccatc aggatttggg agctggaatc ggaccttggt gtggaaaatt 180
 ttttcaaact ttggaatggt ttgaa 205

<210> 800
 <211> 274
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-B7

 <400> 800
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 atgagctcca agttcttcga aaacaacaac aagatgctga ttgtgggtag cgggctgttg 120
 ggtttcgga ttcgcatggg caggagtatg ggacgcaagg agcaactaag tccaaccttg 180
 acgggttttt gccgtgtgat atcgcccta atggcttggt atcaggtttg gccgagaaaa 240

gctaacgttt aactggaaaa cggtcctgac tatt

274

<210> 801
<211> 187
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B8

<400> 801

cgcggtcaaag caggacatgc ctttatgaat cctcccgata aaaggtttac ggatgaaatg 60
agatcgaaag tggaaatggt ggcgtccttat gatgaagaga gtacgcaatt ggcgttgggt 120
ggaatggtag catttttccg taaaaacggg gcgtctttaa taaagtgtgt ttgggttttt 180
gtgaaaa 187

<210> 802
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B9

<400> 802

cccacgcaac caccacgcg tccgcatttt ttcttcaga caaaagcaac aacaacacag 60
tggagggaca aatattcgta gaatggaaca aatattgttg gagagtcaaa acaaagtgcg 120
tgggcaggtg aaaaaggag ccttgtctat ggggggggtg aaccacgttt ccttttctgt 180
accogaacca gtgaagacgg gcaagttctt ttgcgagatt cttggctttc gagtggttcg 240
acgacccaac ttcaattttg acggtatatg gttgtacagt tatggtattc aaatacacct 300
tatcgaaggt gctgtttttt tttcacaaa tatcttgaaa ccaaacacag accatatatc 360
gttcgaagcg gatgacctca caagtataca gaacaaattg gaccctttaa atattccgta 420
tcttttgag tatcac 436

<210> 803
<211> 300
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-C1

<400> 803

ggcctcaaac cagcgtacg cggactcgtg ggttttgcaa aaacatgaac aaaatttctc 60
tagtttcctt tctattattt ggagttgtca tatatgcagt tgcacgacct ctcaagaggc 120
tcaggagctt cggggtgaga ggatagggca ctcggtata ctccaacct cactagcgag 180
tatactccaa gctatagtag tgaatacact cctagctata gcagctccta tagtccagtt 240
tattcttctc cttatcaatc ctcatcact cctacctata gaactgattg gtggattcaa 300

<210> 804

<211> 237

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-C12

<400> 804

atatttttagt tatccgaaca gcattttctac aaagcttcta tgaactatcg atggaacagt 60
tttatgatgg ctttaatgag ccaagaatta actattcccc ccagggttgta aaatggcttt 120
atcaaattga aaatccgggt gctttccacg gatacaatgg cgaatcacat gaccgtcaat 180
ccaaattccc aattatcttt ccctttccat tttgccttgt taaaaaactt ggaattt 237

<210> 805

<211> 268

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-016-Q1-E1-C3

<400> 805

acgcgaccgg gaaatgcana aggttgtaaa tatctttatg tcgatcagca aggccggtgt 60
actggaagca taagccgaca agatgttgca gattgttggt tcaccggggt cttggggaaa 120
aatggcagga gaacagcgtg tcaaggggtt gaaaatccta gtggagcttc ccaatcgata 180
gattatattg gtttgttttc ctcgttggtt gtcgataaag tctcgctcag agtataaaaa 240
aaaaaaaaa acagggcggc ggcccttt 268

<210> 806

<211> 262

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-C4
 <400> 806
 acgcgagggg aaattattat tggaagataa cagtttcact ctcttactga caaacggtag 60
 caatatgttg tttctttgtg tcaagtttat atagactaaa tgcaagggtc aacggggatt 120
 ttaggccgtg aaaaacgggg tgaagggtt tggagccttc agtgaagagt cctgtagtgg 180
 actgaggaaa agttaccact gtttaccaga ggttttgtga atcaatatct ctgcgagtct 240
 acacactttt tcagacaaac ta 262

<210> 807
 <211> 260
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-C5
 <400> 807
 cgtccaaaaa cttgctgtgt tgggaggagg atgatgaaaa aaggcgggtg gtggttggtt 60
 cgtgccgtaa caactgcaac cacaaaaaca aatacgtgga aaagacgggc gacgggggtt 120
 tatgggagtg agtatgagag gagaaaggca aattggaata cttttttgcg atcctattgt 180
 acttcttggg aacccaaacc tttataagcc tttccgtag gttctggcat accctttact 240
 aaaaacgtgt acatggatcc 260

<210> 808
 <211> 273
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-C8
 <400> 808
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 aggaatgtca ttaaccaata tgcagtagaa ctatcaactg ttcgtgacag ggtgaagggt 120
 cgtgaggctt gtgctgatat agggaaagtg ggaggaatgc tcagtaaaga ccgattatcc 180
 atgtccactg cacagaaagg aaatgctgca gtcgacgcgt catattgttg tgaacgtccc 240

caggagacaa acggatggag agagttcaac tca

273

<210> 809
<211> 288
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-C9

<400> 809

acccacgcaa tcaagatgta tgatgcacgc aaagaattga cgcattaaat cacagagtaa 60
cacatgcact tacgtaaacc caacggttga ttaaaaaggt ttaaaaaact ggaaaaacat 120
gggggcgaca caciaattca acaattgggt aaaggggggg ccataaagga attaaaaccg 180
gaaacctcaa aggaggaaac ccacattgca actcaaaaaa ggtccaacca ccacaattca 240
ccattggcaa aaattgcaca attttcagcg aatctatacc cactactc 288

<210> 810
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-D10

<400> 810

cccacgcgac caaaagaaga ggtccaaga accaacaagt cacgaatagc caaagttatg 60
tatgaaaaac tatcaacaag ctgcaaaaac cgtggattag gaaaacactc tatgatatac 120
agggggaggc atggacagac ttgctgaaag ggaggggggaa aagatggcaa aaatttctta 180
agaaaaaaca ccaaaccgaa caccgacaca cgaaactatt gttactcatt caaaaaaccg 240
tattagacaa aaagagccta atccctttat aaacaaaatc ccaaaaaacca tttgccaaaa 300
caaccaatta gaattctttt atgtttttga aacgacaaac caatagattc tacctgcctt 360

<210> 811
<211> 249
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-D11

<400> 811

cccacgcgac caaaaaccgg aagccaaaca agttgtttcg tattaaaaag aacagcacia 60
aatggagtgt tggtagtaa ccggtgataa acatagcact gcattttcac ttacccatag 120
ggggggggaa ttccaatgga aaaggtgttt tcggggggcat tccctgggaa taaatttaaa 180
tttttaaaaa ttttattcca aaattatcaa attccaccag gaaaggccaa ttctcgagtc 240
ctatttggt 249

<210> 812
<211> 244
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-D3
<400> 812

cctccaacca cgcgtacgcc cactcgccg tgaagacaaa gtacagtgt gacgagcagt 60
catattctcc aaatgcttgg aaggacttgt atgacaaata tttgtcggaa gatcgggtat 120
ttttacccaa cccggatgct tctgtggga cctaggtctt tgttcaagtt tccgtgccta 180
tacatgatga ttcttccggt tcccatcaag gctgttcttc tttgaccgaa atgttgatgt 240
atac 244

<210> 813
<211> 93
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-D5
<400> 813

cgcgtctata gtttcgtggg tcccgacagt gacagtccga atagcttttc agctagcaag 60
atactgactt ctgtgctttg ttcctacttt act 93

<210> 814
<211> 274
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-D6
<400> 814

gacaaacgcg tcaagttttc ttcgatggga ggacatggaa ggaaagacaa gtatcctaag 60
caagtgtggc acccctttgg aggcaagttt cctcatccga ggggttgga gaagcaggcg 120
aagggatgta cccgtagtgt ggcactcggg gtgaggccta ttatttacta tgccgagaag 180
catactgtct attaccagta tccttatcat aagattcctt ggaggcccaa ttgaaaact 240
tttgatgaaa atttgaggga acgaataaag gccca 274

<210> 815
<211> 291
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-016-Q1-E1-D7

<400> 815

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aaaggaata ttggcatata ccgaagatat ggtactttct atggagtggg ttcaggggag 120
tcatggttcg agatttgagg ggaatggggg aattatgttg tcggaaactt ttgtgaagct 180
gattgcttgg tatgataatg agtggggcta ctccaatcgt gttgtagatt tgggtgcacca 240
tatggcgaaa gttgatggc gancttaacc cggcgtgtct ggttgttttt t 291

<210> 816
<211> 262
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-D8

<400> 816

cgtcaagttg atacctaaaa agaaccgaaa cgcagttaat acttttattt tatcgactgg 60
agtaattgtg gtgaacaagg aactcatgc caaatgacac ttgcaggggt gacatggctg 120
atcttgaggt taggaagagg ggtgagggg ttacttcgcg gggatatttc gaggaacagt 180
tcagttgggg gtacctttat tatactctga ctgacaacgg aatcgattac ttacgtcaat 240
atttgaatct tcctgtggaa at 262

<210> 817

<211> 312
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-D9
 <400> 817
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 aatagagagc acaaatggcg tgtagcgtgg aattccctac atcgcaactc acgatgggtca 120
 caccattcgg gggcccgacc ccttgatcaa acaaaatgag ggggggattg tggatttgga 180
 aacgggaaaa ctgaccgatt ttctcaaatt tgaaattggc aatttgtgta tgattaccgg 240
 tggacacaac attggaagag ttgggttgat ccagcataca gacaaacacc ctgggtccac 300
 ggaaattatc ca 312

<210> 818
 <211> 266
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-E1
 <400> 818
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 aactgcagtg gctcctttgg agcgtttgaa gattgtgatg ctgatgcggc gagttgctgg 120
 tttcgaaagc gaanattcgg gtattcgggg tttttcccag tctttttcaa aaatgcttgt 180
 acgagaccgt atgcaaggta tgttccgtgg aaacgggtgc aatgttgcaa gaattgttcc 240
 tgttactttc attcaacttg cgtctt 266

<210> 819
 <211> 115
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-E10
 <400> 819
 ccacgcgacc gacgtaatag tgaacgttcc ttgttgcttt ctcaaaattc tttccaccat 60
 gaaatgtcac acctgcgata agtttatgta cccgcggtcg gttgtgtgta cattt 115

<210> 820
 <211> 284
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-E11

<400> 820

accacgcga ccagaagtta gtaggtactc attattctgt taaaaaaact ggacttactg 60
 ctacaattgg tatcactaca agctggatat catattttcc acaatcattc atcatgaaaa 120
 tgggggttct acaacattcc cactcgttat aattggggga cttctcagtg tccgactgtc 180
 tcttttaaca acaagacctc ccagtttgcc agctatactt cttactgtat atctactctt 240
 catctataac tatatattac aacttcttat catcttcccc aacc 284

<210> 821
 <211> 331
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-E12

<400> 821

cccacgcaac caagcttttt tggtttttgt gtttggtgaa attcagtatt gcatatctat 60
 atacaacaaa tatgcgtgag attgtacacg tacaagctgg tcagtgtgga aaccaaattg 120
 ggaggaagtt ctgggaagta atttgtgaca aggggggttct ctctccagat ggatattatg 180
 tacgagacac aaactctcaa ctagacagaa taaatgtcta ttattctgaa gcttccgata 240
 agcgctatgt acctcgtgca attctcgtgg actttgaacc tgtaacaatg gatgccatca 300
 aaagtggtaa aacttttttt tttttttcgt c 331

<210> 822
 <211> 100
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-E3

<400> 822

cctccaaaaa tgtcncagga atattagctc acctacttca aaattcgtgg tttaggcgaa 60
 cctgttcgtc tactatttga agacaatggc atcaaatact 100

<210> 823
 <211> 226
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-E4

<400> 823
 tattaaanga tgttcgcaag tctttggtac aaaataacgg caagcttggt acagttatat 60
 ggggacctgt agcacaatgt gatgtatddd ctatcctcg caaggtgctt ggggactctc 120
 atcgtgacga tcatcgggat gatcggcatc acgaggagag ccattctgca tcaacgcatg 180
 aacaggagaa gcaacattcc gtgcattgtc attgtggttc tcttca 226

<210> 824
 <211> 258
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-E5

<400> 824
 cgtcaacgcc ccttctggat ggacggcgtg gaagtagaca tgggaagttt gtcttgtgca 60
 gatgtaagac ctgtattacg agaggagaca gaacgagact tcgatgagcg tattcgacgt 120
 gcaggacagt ttctagtga gggtcgcggt acattaccag aacacaattc tgaaaggaag 180
 agtcttaggg agttgcctac agcaactaca gtagttccac gcgccaaacc tattcccaag 240
 gagaaaccgt tgacgaaa 258

<210> 825
 <211> 207
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-E6

<400> 825
 cgtcaatagc tccaaggtac acgacagggt tgctcagatc tgttccccag ggagaagcca 60

agtatattatc acagagaata gggtattact tgtttgggtt acaggtgggg ccagagggta 120
 tccctgcgat gagtatgcgg ataatggac ttggtgggta cctcaaaacg gaaaggcaaa 180
 aacggaaaaa atcccacgt aaacggt 207

<210> 826
 <211> 267
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-E7
 <400> 826

cgcggtccacg gacgcgtggg caggactcct aagtgagtaa cctctagttg atagagtatg 60
 gaagataagg gaattcggca aattggatcc gtaactgtgg gacaagtgtt ggctctgggg 120
 gttgcgggga agtctgcgtg cggaacagg tgtcttttct ggctgttggt gtgtctagga 180
 atggtttttc gactattctt gggatgaaac gatggccaga gacactcgtc gcacgcacga 240
 agattcatct cttttttggg ggatgga 267

<210> 827
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-E9
 <400> 827

cccacgcgac caccacgcg tccgagcaat cgtagagcag aaaaaatggg tgtaaaggtc 60
 gagtactaga gtaagtgtaa aagggaagg aaaggagaga aagaggaaag ggatgaaatg 120
 cggggatctc tacagaaagg caagaaataa agggggggaa gacacagtaa atgaggcgag 180
 aaagcatatg aagtgaaacg gattaggaac ccgtgtagtc tatgcagtaa aagaaacaat 240
 gagtaacaaa aaaggagtc attccaccag gggagtaaag gcccaagaaa gaaacccaaa 300
 gcaattgacg ggaatcttta ataattgtg gatcacctaa attaatccga taaacccaaa 360
 accttacctc t 371

<210> 828
 <211> 300

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F1

<400> 828

ctccagccaa agtaatggta gagcttgac aacaacaaga cgaagaactt ggtgatggta 60
 caacatcggt ggtattatta gcagctgagc ttttgaaacg atcgatgat ttcgtgggac 120
 gaggcaccca tgcgcgcca cggtattgca ggatagcggt tagctatgcg agagtcttgt 180
 aaatatcttc gagatacttt gtccgtatca gtagaaaact tgggaagggtc ttgcttgata 240
 aacactgcaa agactgccat ttcctccaaa gtaattgggt catggattcc gttttttgcc 300

<210> 829
 <211> 321
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F10

<400> 829

attcgccgcg cccaccacg caaccataaa aaaggcaaac attcgattcc ttggcaaaaa 60
 aaagcgagac agagacagag tggagcggtt tcagaaatga ttgacttgtt tggtattttc 120
 aatacacgag ggttggggcg tcctttatga tcacctcaat catacaggtg ttactcccgt 180
 cgacccttta ataacgtcaa ttcctcctgt ggacacagaa tgattcgta gctcccctat 240
 caaactatac actaaaatgg acactttcca aaccacaacg ttttattttt tccgctcgtg 300
 tttccctaaa aactacccat c 321

<210> 830
 <211> 103
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F3

<400> 830

aggcctccaa ggacgcgtag gtgcggtact tgtgtgtgtg tatatattga tgtatgacag 60
 ccatgtgggtt attgcgcctt gcgaaaaaca accattccgt acg 103

<210> 831
 <211> 80
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-F9
 <400> 831
 acccacgcaa ccatatactt catcttcttc ctatgcgact ccaacataat ctactaccta 60
 ttcacccatc tccaatgcta 80

<210> 832
 <211> 278
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-G1
 <400> 832
 aggcctccag aagatttagt tggttactat tagtggaaat cctggaacaa gcaagactct 60
 gttggcatta gctgctgctg tggagcagca tcgagactat agtcagatct acctttctgg 120
 ccctagggta ctgcgggagc aatcgcgata gtggatatgg tccacnaagc gttgattcga 180
 gaattgagcc ctacatgcaa gcattgttcg acaacctggg tgtgatcaag tccttcaata 240
 gcaacaagga ggattgtaaa gcgtcttctg gagcgtct 278

<210> 833
 <211> 185
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-G3
 <400> 833
 ggtttagtcg cttcggtcct tcttttgtaa tactcgtata ttgcacgaca aaaagtcctt 60
 aagatggaaa gagctttgaa aagcagtgca cgtgttgtgc cgatacggcc aaaggggtgtc 120
 gaggcttcaa gagggctctga aacttgggcg ttgcatgtag tcgggtgccac atgggatggg 180
 ggttg 185

<210> 834

<211> 269
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G4

<400> 834

agaagaatcc ttaatagtga aatgtataac taagctattg aaaactgggt tctcttccgt 60
caacgtttca atgctattgc gggatattca tgtatagtta actggagggt gtgtgggaaa 120
agggcggagg gagtatgtgg aacgcgccga cccgggaatg gaaattgtga gagttttact 180
tggcgatttc gtgaaaattc atggcgccaa aatatggcaa ttcaccagtc ctattccact 240
ggaaacgaag cctcagttga gttttttga 269

<210> 835
<211> 294
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G5

<400> 835

cgtccactta tattctttgt gcttggccaa tggttgcaaa aactgctctg agttgcctct 60
ttctctcttt ccttatcgct gccgcagttg cagcggacgt agtttcaggg gagagggggg 120
caggggctca gcaaaccgg caacaggggc agtgccaaca agtatgtaga cagtatgcat 180
actatcagag tccagtctgc acttccgtaa ccacacagag ccatactgg acccaatgct 240
cgaagactgt gcaaacctt ggcccaagcc agtgactgc ttggacccaa tctc 294

<210> 836
<211> 276
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G6

<400> 836

cgcgctccggc gagaagggtg atagtcgaga gggaaaaaga ccagaagcca agataaggta 60
tcaaagtaaa gaaagaagga aaaggagaag aagagaggag acgcttaggg gcagcagggg 120
agagaggaag gcttgaaagc aggaaagagg ggaaatccga aaaagaagag aaaaaggtaa 180

gaaagaggac cgaatcaggg taagaggtag aggagcaaga agagaagaga gaatgctggg 240
 tggagtagcg aaacaagaga aggggaagtaa aaggta 276

<210> 837
 <211> 248
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G7

<400> 837

cgcggtccatc tggagcacgt tcataggagt gaatataacg ttcttcccga tgcattatct 60
 gggattagga ggaatgccac gtaggatagg agaatacgcg gattgatatg ggggatggga 120
 tatggggcca attatggatg gagatagggg tgttatcgaa gttaaaacgg gtgttggttg 180
 gaattaaaag tttggaaaaa ggtaaggaa attgatttaa ggtggaaagg aaggattata 240
 cattgggg 248

<210> 838
 <211> 274
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G8

<400> 838

cgcggtcaacc cacgcgtccg agcaaaaaga aagaaaaaga agtagccagg taagacccga 60
 agctagttga tcttatgctg tccaagcgaa gtaaggctag tccagtatgg gtggaaaggg 120
 atttgaagg gattggatag ggggtcaagg gccaatcaaa gctagtata gctggtactc 180
 ctcgaaagct atataagtag cgtatgcagg aaagaagaag gtaaaggaag agaaggaaga 240
 agcagagagg gactatgagc gagaaggtgg atag 274

<210> 839
 <211> 293
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-H1

<400> 839

ccatttaaga cgagcctgga tcacatttgg aagaaaatat tatgaaagaa gccaaagaaa 60
gaaatgtaaa gatacatttt ccagtcgatt ttgttgtanc cggtcgtggg gctcccgatg 120
cagaggcaga gatacgtagg agagaagggg gtattcctga gcatatgcaa ggactggatt 180
gtggaccaca aagtattcaa caattttattc aagtactgca acattgtaat acaataatgt 240
ggaatggacc tttgggtgtg tttgaaatgg atatagaggc aggaggcact cgt 293

<210> 840
<211> 275
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-H10
<400> 840

cccacgcagt caagttgttg aggagttatc gatcgaatac aatgaaaaac gatttggaca 60
gttttttatt tcgttttgtt ctcgaatact tacaacgaaa aggttataaa cgagctgcag 120
aggccttgaa aactgaatct aaagctgaag ttggggagca ctttcaaaac cctccacaat 180
attatacaca accactttca aaatttcccg aaaaaatcct aaaatttcaa acacaaacac 240
aatcctttcc aggacactac tcaaatttca acccc 275

<210> 841
<211> 276
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-016-Q1-E1-H12
<400> 841

gcataattac gcatgtccga atagaaatta ccacacaaag atttgaaacg cgcctttgag 60
ttggatcctt ccaatgtagc attgaacaaa aacatccgcg aggggtccca acttaacgcc 120
gaacaacatg caggggagtc cacgttattt ggaaatatct ttgcaccttt aagacacact 180
taagaccata ttcacaacac atcaaaccac taaaccaacg ccaaacaaat cactgcctct 240
taatgacctc aacttttttt atttgagtt accata 276

<210> 842
<211> 271

<212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-H3

 <400> 842

 acgcctccag agagaancac atgtagaaat tccaaacgtt aattgggaag atattggtgg 60
 cttacaagag gtcaagggtg aactgcaaga aaccgtacaa taccctgtan agcagtccag 120
 ggaactttga aaacgtgggt atgcagcctt gaggacgtgt cttgttctac ggacctccag 180
 gatgtggaaa gactttactt gccaaagcaa ttgcgaacga atgtcaagcc aatttcattt 240
 ctatcaaagg acctgaactg ttgaccatgt g 271

<210> 843
 <211> 278
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-H5

 <400> 843

 gacaaacgag tccaggagca attaccaacg gccaacgtgt ggatgcaact cttcctacca 60
 tcaaatatat attagaaaaa ggagcaaaaa gcatcgtact tctgtcccat tgtgggtgga 120
 ccagagggaa tgggtggacaa aaagtattcg ttaaaagggg tagcgggaata ttacaacag 180
 cggttgggtc gaccggtcgt ctttctggaa gactgtgtgg ggcctcaagt agagcaagct 240
 tgtaaagacc cggcgccctg atctatcttt ctgatgta 278

<210> 844
 <211> 271
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-016-Q1-E1-H6

 <400> 844

 cgtcaaaacg agataagggg ggcacagtc tcaattcagc cgtacagaac acaaacttgg 60
 atattgaaac ggttaaagca atttgtgctg aatattcagc tcacaaggca gtacgggtgt 120
 ttcttttagag tgttccaggg tttgtggggc cttgaaagga tatttccttg agagaggacg 180

caacagctga tgacctaatc gatgttatatc aaggcaatcg aaagtatata cctgctatatt 240
acgttattaa caaggtggat tgcatttctg a 271

<210> 845
<211> 293
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-016-Q1-E1-H7

<400> 845
cgtccaggaa gtatttggtat tagttggcat tgatggtatt tatgggtccga cagaagcagt 60
tattattgctg gattcgagtg cacgtgctga ttacgtanct nccgattggg tagcgggaagc 120
tgaggatgat gaaatggggg ttcttaggct tttgacctgc agtagagagt tggcagaaaag 180
agtttccagg ttacttgtgc aacaattgtc cagtttatct cgcagctcta ctgctttaca 240
ttccttataa catcatggcg gcattgtggt gagaagcgcc tgggangaat gtt 293

<210> 846
<211> 298
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-H8

<400> 846
cgtccggtgc tccgctcca ccaggaccac ctctccaac cttggcaaag acaagctcgg 60
atcacgagcc ctcggaatct tcagcacatt ccgcgttggt ggcagccagc aactcaggag 120
gaacggaggt gacgaagaag ttgacggggg tgacaaaggc agaaaaaggg caaggtgaca 180
cgtcacagga atcgaaagac tcaactgcctt cgaaagcccc agccaagtca aaagccgttt 240
ccaaagcttc gcagccgtcg ggcgaaccaa aatgttagtt atgggactgg aagacttg 298

<210> 847
<211> 377
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-016-Q1-E1-H9

<400> 847

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acttgtagcg acggtacccc acttagttgt gcggatagaa caacgttggg aggtattttt 120
ccaagagttt gttgcgggga cccaaagcaa agttccaggc gtatgtgggg gcgcccttta 180
ttctttcgtc actttcgten tgtgaacgat agccacaaca ccatgtcaac gctagaacac 240
ttacaggaaa cgcagccttg tttgaatgaa aaactgctag aacaattttg aacaagacgg 300
ccttgtaaca tccgatagac aacgaacaat tttttttttt gtacgcactt cacaattttc 360
cgtcaccttg gtctcac 377

<210> 848

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A10

<400> 848

gcgtccgctg agaggaggaa agccacattg gaattgaaaa aaggtcctaaa caagagaagt 60
cagcagtggg gaaaattggg caatgtacag ggaagtatga cccagtaatg aggagtgggg 120
taaacagaaa aggaagtaaa aggagggaat gaacggaagt tatggcaaaa acacgtgcc 180
gcagcagcgg taaaacgtgt gtagcaagcg tagagcagaa gaactgggtg taaaggtcga 240
gtagtacagt aagtgtaaaa gggaaaggaa aggagagaaa gaggaagggg atgaaatgca 300
tatatctcta gagaaaggca agaaagaaaa gaaaggaaga cacagtaaat gaggcgagaa 360
agcacacgaa atttaaagcg tttaagaaac cctttttaatc aatgcattaa aagaaagaat 420
gagtaag 427

<210> 849

<211> 344

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A11

<400> 849

gtcaaagcca aaagcagttg agcacagcaa tatcaatatg tcaagtggct ggaataacta 60

tagtggaacg gaaggtaatg ggaatgctgg tgctggacaa gggaagaacg gggatgggaa 120
gaccagtgga gaacttgcag gagatagggt aaaggggttg ggaatggcag ccttgtcagc 180
gggtaagctg gtttatcgcg gtggcaagtg gtgtgtggat aagggtggaag gcgccattga 240
cgaccacaag tcaaaaggaa gtaagagtgg cggtggtgga aattcagggt attctcgttg 300
attcgtaata acttgatag aacagaacg agaccgtttt ttaa 344

<210> 850
<211> 354
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-A12
<400> 850

cgctccggttc tatataacgt taccgccaca ggttggagac acaaaatcac acagtacaca 60
gataacaaga atttttgctt gttcagaaga aacaagcata acaaatgcgt ggggtggtggg 120
taaaagaacg cggttgagct tagactgtga acctttgttc ttctgactgt ataaagagtc 180
ttattcttcg taactcggtc caaacctgag ttttctgtc ccctaaaaat aagacattct 240
cagctgtctt tgtccttttt caaggtgaat atatgattac accgaggagc ttttacactt 300
atttttaacg tgcggacgca acagttttgt aattgttgtg tgtaatccca agtt 354

<210> 851
<211> 384
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-A2
<400> 851

acgcgtccgc catcgagtcc gccacgcgt ccgcattttc ctggaatcat ctaggttgca 60
tttgaggttc gcaattttcg agatagaaag caaggcatat tggaaatggc tcgcgtttta 120
cgaaaggagt gacaacctcg gtggttgccc tgacaagtgg tggatcatgg aactcaccac 180
gagaaccaac aacgacgaga gctatcattc tggaagaaga gctgtattgc accgaattgc 240
ccagttgttt atacgttatg tggttccctg tctacgttta tggttgacag gtagtagata 300
tgaatatcat tatttacaac agattttttt ttcttttccg gatgccacca cgtttcaaca 360

gtttttacag acacaatgtg ggtt

384

<210> 852
<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A3

<400> 852

cgctccgggaa gaacaatttg caagagggtg aacaaatgct gatggaagct cgtatgcgca 60
tgcttacact ggaaaatagt gcaggctcca cattacacgc agttccagta gttcttcaag 120
tggcgcgta acaggaacag aagcttctga atcgcgggga gttgcatttg aaattgtcat 180
gggctattac cctttcatta caggctcggt ccagtatatt ttacataaac atttcataga 240
gcctttggaa gaaacaacga agcgtttggt tgtggcaagg aaagctttga ctgatgtctc 300
actttcttgt atattagatg gtttatcatt tcgttctgtg cagttttttc aagaatttgg 360
gttattatct gcaaagagaa ccgcacgcgt tgcttggtat tcggcaaatt ttaccagaag 420
aacact 426

<210> 853
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A5

<400> 853

cacgcgtcag ccaacgcgtc cggaacgctt ggccctcggt actgaaggag aagtagtttc 60
tacttttgat catccagaat tggtaaagtt ggtcactgt ggtttgattg aagaggccat 120
gggaggggaa gatagagtta ttcggttttc caggggtggt gcaaaggaag cttgtacaat 180
tgtattgca ggtgcaaaca agcagatttt agacagggt gaacgttcgt tgcacgatgc 240
actttgtgtt ctttcacaaa cggtaaatca ttccaaagta ttttacgggtg gtggctctgc 300
agaaatgttg atggccaaat tattttatga cttagcaaaa actattcctg gaaaacaatc 360
acttgctgtg gaaggctttg ctacggcatt gcgtgctatt ccagcttggt gcagacaatg 420
cacgttttga tgccacggaa ctta 444

<210> 854
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A7

<400> 854

cacgcgtcag gaaacgaata aatctagagt agaaagctgt aaaaaaaaa gagggtaagc 60
 ttataagcag caaaccacag aggaaagcgt taaagcatga aagaaaagaa atccgaaaaa 120
 gaggagagaa aggtaagaaa gaggaccgaa tcaggggagg aggtagagga gcaagaagag 180
 aagagagaat gctgggtgga gtagcgaaac atcagaaggg aagtaaaagg taagagatga 240
 aagaccactg catgaagata aggaatctaa ctgagtaagg aaaataagct taagctatct 300
 tggttgggga agtaagcct aatttttttt atattaggca agcaaaagca tgagagaagt 360
 ataatagcat aagcatgctt gaagaaaaag aaagagattt cagaaaggga agaaaagtca 420
 gctatagaga a 431

<210> 855
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-A8

<400> 855

cacgcgtcag ggacaacaac gatgcgcagt aatgtcgga ttgttaactt tgggtggacaa 60
 ggataaagtt gctgatataa gagaacaaca gaaaagaata acggacaagt tgtcttccaa 120
 tagggcgaaa gtggaggagt gtgtgagga actggggggg ttgtatgagg aaacctgcag 180
 tgactttcaa aggacgcttg gcaaaataag gcaactaaaa gaagacttgg agtatatgga 240
 ccgcgttttg aatactttgc accaaaagaa ggaaggggat agtcaacaag agactgggga 300
 aaagtgactc gacttgcaac aatttgtctc tagcttaacg ttgtaagttt catcatttgt 360
 atctttcttt gtgacagttg ttgttgttgt tgttggtaaa cactatgttt tttttg 416

<210> 856
 <211> 324
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-B11

<400> 856

cgacgcgtca acggacgagt gggcgatgag gaacaatata acaagcgcat ggcattgtcg 60
tgtcctttcc tttgtttgtg gaagcgatga cttcgattct tcacgacttg ggaatgggct 120
gggggaacac acccaatata ccccttgcgc gggagccatt gatagaactc cttttccact 180
tccttgctcc aaattatacc cccatctaca cctggatata tacgcgctta cgatactacc 240
gtttgacaac cacacaactg ctgtcttgac tgctggcgac tctgcctctc acgtggttta 300
tttttttttt tcacctcttc ccct 324

<210> 857

<211> 316

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-B12

<400> 857

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tgaagtgttg tgcagttggg tgacacaatc ggatgtaccg ttggtagcgt tgacgacggc 120
aggcactttg gctcgaggag tgagcgtggc aaatatttca gtggattgca ccggaggaga 180
agaatttggt gattattcct cttttttgtt tgtatggtac catggaacaa cgaatgttgg 240
aaaagaagaa aggagaggag ggagaacaag agtcgattcc aattcggtgc aaggtaattg 300
attttttttt gaaaga 316

<210> 858

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-B2

<400> 858

gcgtccggtg gtagattgag ttggtttggg attgttgtgt ataagaggag ttgcaaagag 60
gaaaacatgt caaagtttgc cttgcctgca ttgccttatg actacagtgc cttggaacca 120

cagggcgaca ctatgactat gaacgtacat cagaggggcg atcaccaaac ttatgtcaac 180
aatttgaatg gtgccatata aggggaacat gggggtcagt tcaaggtct ctccatcgaa 240
aacatccaga ggaatgctgc aaaggcacct gatgctatca aggcaactgt gataaataat 300
ggcggtggtc actacaatca ttttttgttt tggacactca cggcacccac acga 354

<210> 859
<211> 312
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-B3
<400> 859

gcgtccgcta ccacaagatg acgagaatgg catttgtaac ctacaatgac ttcactgtaa 60
aaaaaccgaa acacaataat gcgaaacata cttcacacag aaccaagatt atggcttcca 120
acggtggttc tgccttcgat tagccttata tacagggagt gacctttcgt ccttcagaaa 180
gctactaaaa cacaattttt gcacaccctt tacagaaaac gtggtcagga gagttatcta 240
caactgggtc ttgggaacgt ctcatatcaa ccagttttct tgacgaacta ttggttcttc 300
cggagtcac ac 312

<210> 860
<211> 441
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-B5
<400> 860

cacgcgtcag ctatcctttg gtacaatgga tttgactggt gcataagatg tttctcaact 60
tgttggagct tcaagtcgtc tattttttagc aagcgctcct gtacaaaata gcaattcaga 120
ggctcgtggt ttattatccg cattaccatc tcggggggac gaagttgctt tgtacacctc 180
ggcggctgga gtcgtgtttg gtttcccta tttgactcca aaacggcccg atccaaacaa 240
agatacttgg taccagagca tcaaaaagcc tgtttgtgaa tcaccaatt ggttgtttcc 300
ggcagtgtgg atcccactct tttttttata aagcgtagt ttgttcttgt tatggaacat 360
acaatgagaa tttcctgcta ttcctagtgc tgccattgtc gttcatctga gctttgggaa 420

cttgtggaac tacctgtttt t

441

<210> 861
<211> 454
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-B6

<400> 861

cacgcgtcag ccatcgcgtc cgatgggtctt gtacctttgc accttaaaaa tgcagcttca 60
aactttgaat ctgaacttaa atccattctc aactatcatt tacgtgaact ttatcaacag 120
acgtgggggtc tgaaagacaa agtttctgct gttgggggggt gtcttttctc ggggtcaaagt 180
catggggcgt taccctcaga agtggtgccga gaacatataa atgcaatatg cttttttacgt 240
gacaacggcg gctgggtctcg tctagaagaa aggagacgtc aaatatagaa cctaaatgct 300
gaagtcagaa aaattctttc attttgtttt cagggttctcg acaaggagag ggatcgtgca 360
cttattgcag gggctcgtat atcgaacggc ttgcgggtctt atgatgaaaa ttcacgcct 420
gtaacaagag gatacaaaca ggaactgaaa agat 454

<210> 862
<211> 399
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-B8

<400> 862

ccacgcgtcc agcaaattt ctgtcctgct gatgattaca acactccac accacagcat 60
tacacaccta caaccaacac atcaatttgc atgcacaga ctgtgatata atgcaacgga 120
tacgtttaat aaaatcaaatt catggggggag ggagattcaa agagggttga acaaagtggg 180
cccttgcaag gtagaatatc ttactatga tattgaagac cttctcatcg attcagctga 240
tttatcacia totctgggtga tgacttaata agttggcaac atacactaac cacacttcgt 300
ccgaaaaatg taggcattgc aatactacat attcaggata tacttttttt ttcatacacc 360
ctcgtatcta aaccctacaa aaccatctg tagaattgt 399

<210> 863

<211> 222
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-017-Q1-E1-C12

 <400> 863

 gtccacagga aacttccatt gagtgccttc caaagcaaatt acaattgctg gacaaacagg 60
 aactggaact gttagatttg aggaagaggg tatggcaact cataaagaaa ggagagtgtt 120
 tgccacgttt ggactgtgca gacgtgggac tgcgtcctac tattcaaaca agtaaaacca 180
 cacacttcaa gctgtgtgac cactgttttg agacgtattt tc 222

<210> 864
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-017-Q1-E1-C2

 <400> 864

 gcgtccgccca gcaagtccgc ccacgcgtcc gccacgcgt ccgggaattc tcaaccagcg 60
 ttagcttttc atctgaaaaa gacaaatccg gttttgcagg attaacaagg tcttcaaatt 120
 atgggggagt tgaacctcat cgacgatgtt tcgaatgagg gtgtacgcaa ccattcgagt 180
 gaagatggct acattacagt tgttctcgca ggagtagaca tgaaacacgt aaatattacg 240
 aggagtgaag acaatcaagt tgaaatggaa gttgcatttc aaagtgcga tccccacaat 300
 ttcctattct ggagagaaac tattttatct tcaacaagaa cagtaaattg cacaaagttt 360
 acatgtttca gatagaactt ggctttcgac ctatacaaga gtacatggaa aacatg 416

<210> 865
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-017-Q1-E1-C3

 <400> 865

 gcgtccggaa agagaaagta tagagtgtgc ggcctgccaa ataataaaga agaaatcgat 60
 gaaagtgaaa gcgagtaaaa gatgaggtat agagaatggc ggtcctaact gtaaggatcc 120

aagggtggcg aagtaaatag acgtttgaaa ggcgtgcggt atgaaaggag aaacgagtgt 180
agcactgtct aatcgtccaa ctacgcgaaa cagcaataac tgtgaaaatg cagtaaaacta 240
gcagtaggac gggaaagacc ccataattct tgactagata ggtttaggga ggagagagaa 300
tcatgaagta gaggaggtgg tttattttat gaaagaccac tgcattgagga taacgaatct 360
aactgagtaa ggaaaataag cttaagctaa tttgg 395

<210> 866
<211> 418
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-C4
<400> 866

gcgtccgccg gcacgtccga gagaaatggc aggcaacgtg gaaaaaacac ttgacttgat 60
tttgttggca ctacgcgaag aaatactggc caagttgcgt ggagacagag agcttctagg 120
aaggcggagg ttggtacgaa taaatatctc agtggggagt gttgatattc attcaggcgt 180
ttgatcaaca catgaacttg gtgttgagcg acgtcgaaga aaccgcgttg aagggtggaag 240
tggataacga aacgggagaa gaactgataa agtcggtaaa aagaaagatg cccatgttgt 300
ttgtgcgtgg agatggcggt taatagtgtt gctccacccc ttcgaacggc ctaggaagaa 360
cgtatgtgta aaagctattc tcaggtttct tgggttctcg acgaagagtg atgacacc 418

<210> 867
<211> 466
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-C5
<400> 867

cacgcgtcaa ccagcgcgtc cgcccacgcg tccggccaat ttagtacaaa tcactttggt 60
gcagtattgc cagtgcagct agaagaaaca taagaagtcc aaactttttg gactctactt 120
tgagggctat ctacactggc aatgtaaata caagggggag tgtcaagtta tccctttttg 180
taggaagaga gtgacaaggg agttgcgtta ccaagacggc atgtctaggc actcggcgac 240
acaaaaagat aatgtgtagg gcaaaacact gaatgagagt cgatatagag tgagcgtgca 300

tgtcactggc aatgtatcat ttgttttttc gtccgttaca tagccagctg tcgtgtcatt 360
 gtttcttgcg ttagttagct cctgtataac aatgctacca agccttcttg caatcgtcca 420
 ggcacatcag caatttataa ttcaagtttg ctttggaaaa ccaaac 466

<210> 868
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-C7
 <400> 868

cacgcgtcaa ggacttgatt ggtgttgagg tttgtgagag acaaaaagta cggaaaagga 60
 acaaaaagcag ttgcgtattc ttgttacagg tgctggaggc tttattggct cccatcttgc 120
 aggggggctg aaggaaaaag gccactatat tagcgggggg gactggaaag aaaacgaata 180
 ttttaaacag gaagactttt gtgacgagtt tcttctttta gaccttagag agctccaaaa 240
 ctgtatcaag gcaactaagg actgtgacca cgtttacaat ctggctgcgg atatgggtgg 300
 tatgggtttt atacagtcaa ttttttctgt tatcttgtat aacaatacta tgatatcggt 360
 taacatgctg gaagcagcca gaataaaca cgtgaagaga tatttctatg cctcctctgc 420
 ctgtgtgtat ccacaaaata aacagctaca ccccaaaaat cc 462

<210> 869
 <211> 449
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-C8
 <400> 869

cacgcgtcaa ccagcgcgtc cggctgaacc attgggaaag ttaaacactg gtgcaactat 60
 tcctcttcgt ggctttggaa cctggaaagc tgagcctgga gtgggtgggt aatgtgtgaa 120
 agggggcgtat gacgtcagtt acagacactt tgagggtggt gctatatatc aaaatgaaaa 180
 ggaaattgga caagcttttt cagaactttt ctccagagga gtgaagagat cagacatatt 240
 tgtcacttct aaagtgtgga atacctgcc cgaacctcaa agagtggctg aagcttgtaa 300
 acaaactctg caagatttat ttctttttta tccagacctt tacttgggtc actggccttg 360

caactgggag tttacgggtc tgcctattac tgcagataac tggattccca atgatcagga 420
 tgggaacata cagttttcca aggtttcac 449

<210> 870
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-D10
 <400> 870

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 ataagaaagg aaatggtgat ggaataactt ctgtttcatt tagtcctcgt tggccttggg 120
 gtattgcgac tggttcgttg ggggagaggg tgagagtatt cgatgtagag accggtgaac 180
 ttttgcacaa ttttcgtcaa catgcatatt ctgtatatc tgttgccttt tcgagtgatg 240
 gaagatatct gctatcacgt tcaattgata agaacgttat attatgggat tctgcatctt 300
 tttctttaa taactataca attttcaaag gccatactga ctttgttttg tccgtcccaa 360
 tttactctaa at 372

<210> 871
 <211> 287
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-D3
 <400> 871

gcgtccgtaa tgaaatacct tgcacagcc agtgagtata agatcatgag gaggaagtat 60
 aggaagagaa gaagtagaag aaatagttaa ggtaataata ataggagtaa tggtagtat 120
 agggaggaac atgaggaaga aagaggcaaa tacgggaggg cagtaaaaca agaaagagaa 180
 aggaaaaaac tgagtatcag gaagaaaaca cggagtacat gatgaaagaa cgatcaacga 240
 agtaacacta agacaaggag taatctgaat gaaaccagga aagtatt 287

<210> 872
 <211> 447
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-D6

<400> 872

cacgcgtcag ccaaagcgtc cgtttggaag agctgaggag aaggaaaaag ccaggaggca 60
acaagaagcg ttgaaagctc aagtggggaa tacctgcaaa atcgtagaag aaaatactga 120
aagtgcggtt tccaaaggtt tttcagttgc ttgtgggggg gacaaagtgc aatacaacgc 180
gaaaaaacac atggagagga agcgaaaagg agagtgcagg acgcttcgaa aagacggtgg 240
atgtttccgt tgttggaaga agagtcgagt gatgaggagc aggaggatag tacgacaagt 300
ccaactactt gtttggtatc tatttgtttc ccgtcgtcaa gtgaaacatt gttgccttta 360
tctgtataat aacttgtaat aacacacata aataaatata actagagata ttgtttctag 420
atgaaaaaaaa cacaaaaaag gccgccg 447

<210> 873

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-D7

<400> 873

cacgcgtcag ccaacgcgtc cgaatatttg tgcgcgcgcg ctcttatttt tttttttgct 60
ctttcttgga tgagaatcaa tcctttatta agaagtgatg ggtctcctga aagaaaagaa 120
gggggagcat tcgtatggga ctgtagtttt gtcggtgggg aatattccat aacagataga 180
gatgggttta taaaggagga atactttggg tttggacaag tatatgtgtc attgtttcga 240
ctggtattca tttggaagcc tccttgctgt cctcaatatc gagctttgga gttggagttg 300
agtagcatgt tcgaagaatt ttttttttta gagttgtttg ggccctcctgt atttcgagta 360
aaagtcaacg agtcggtgga caatgaacaa caacagaacg gttgtctgac aggggtttttg 420
gaattttctt gtttt 435

<210> 874

<211> 295

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-D8

<400> 874

acgctaaaga attgacgcac tagatcacia actcacccat gcaagtaggt aactcgaatg 60
ggttagtaca taagtgtgaa acattggaac aacatgaacg cggagagaaa ctcctatata 120
cccatattca aaggcggcac gtaaatagga cccggaatct gacaggagga aagccacatt 180
gcaacctgac aaaagggtcca cagccgcaga attcatcact acgaataatt ggcctgtctc 240
caaggaagtt ttaccagta ttgcagagtc cattaacag aaattgtatt acaac 295

<210> 875

<211> 290

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-017-Q1-E1-D9

<400> 875

gtcaaccac acgtccgga cgagaaaggc gtcgacgacg aaagaagatc gctgtaggaa 60
caacgacata aaatgtctgt tttattacaa agttcggatt ttcaacacat tcttcggagt 120
tctgaatacc aacattgatg ggaagaggaa agttatgtat gcgttaaccg ccataaaggg 180
tgtgggtaga cgtttctcca atttagtctt aaaaaaggcg gaggttgacc tgagtaagcg 240
tgctggagat ttgacgtccg aagagattga ccgcatagtc accatcatgc 290

<210> 876

<211> 325

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-017-Q1-E1-E10

<400> 876

gtcaaagtaa aatgagggaa tgaagggaag ttatgacaaa cacacctgcc agcagcatcg 60
gtaaaacgtg ttagcaagc gtacagcaga acaactgggt gttaaaggctg agtacgggac 120
taagtgtaaa acggacagga ggggagagag agaggaaagg gatgaaatgc agagatctct 180
agagaaaggc acgacagaac agaaacgaag acacagtaaa tgaggcgaga aagcatacga 240
agtgaacgg attacgaacc cgtgtagtct atccagtaaa agacacaatg agtaacattt 300
tttgattca ttccaccagg ggagt 325

<210> 877
 <211> 310
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E11

<400> 877

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 agtcaataat aagacttgta ctgaaagatc aaacctgttt catattttct gagttcgggg 120
 accaattaaa gtttgaaatt ggagtcggga gattatatca gaattgggag tcttcatacc 180
 agcatatgac gaacactgaa acgacagcga cgaccaacaa taaccgtcca acaatctaca 240
 aattcttaca ttctctaatt tttagaatcc ttgttttctt atataaagtt acccaatttt 300
 tttttttttt 310

<210> 878
 <211> 303
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E12

<400> 878

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 ccattcgatt gaagaccgtt cttcatttgc cgggacaggg ggtcacatga ccaacctcac 120
 atgggcaggg aatcgtcctc cggctgagca cactaatcat tccactgcca cgactacaca 180
 aactcctcaa atgacagttg ttcaagaccg tcataacacc tcatatgaat aacctacttg 240
 cattgtgtcc gtttgccctt aaaaaacctc cccccctttt tttttttttt cggccgtccc 300
 ccc 303

<210> 879
 <211> 331
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E2

<400> 879

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gcgccttttg tgtatcagcg ctttctcgtg tgtttgttta cttggaaccc tctgttgatt 120
gggggttttc attctaattt ctttgtactc aaagggagtc gacggtttgt tacactgact 180
gttggtgccc ctgttttagc tcttgccgct agtctttcgt ttgcgcatta ttatcgacgc 240
aaaagtatgc cgatttttgc aaacgaagac acatttttcg agtgaaggca caatgtttgc 300
gaaaataaac aatagtttcg tgattctttt g 331

<210> 880
<211> 212
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E4

<400> 880

gcgtccgaga ctactgtttt gcttggtcgc aatatgtggt caacaatgaa agtgggttctg 60
ctgctcaagg cttagtcgcg cctgttattc aatttttata aagaatttat aagaattgta 120
aggggggggag ttatacttta aaaaaaaaaa aaagagaggg aaaataatca aaatacgggg 180
gaaaccgtca aagatattat gtaaaccatg aa 212

<210> 881
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E5

<400> 881

cacgcgtcaa ccaaagcgtc cgggtgttgtt gtcgtgtacg agggtaagac atttggtgag 60
ctgaagagtc aatgaacaag cttcagttgc tatacgtaac caaacaagct gtttcaaaag 120
catgggagag agaacagaaa aggttatact ccgagaggga ggtcagttgc agaaggaact 180
ttgggaagca ggtggaagga aagagaaact gcacaagaga gcgcgtactt taatcgtgaa 240
gatgagcagg cagtacaaag gttagcagcg aaacttcggc agcaaattga gccatcggag 300
gaagtactcg cccaacaaag aaattttttt tttagaaatc ttacaaaagc acgggtgtcca 360
gcccaatcaa agtttgattg aagatattgt ccgtttcttt cattaattcc cccgtgtttg 420

atgtttaact gccgttcaac tacaattttg

450

<210> 882
<211> 462
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E6

<400> 882

cacgcgtcaa gtacaaagca ctgctattta gtgtactgct tcataaacac aatatccacg 60
acgtataat ctacactaat tgtgctgttc cagcttctcg cgatattgct ctggagcttc 120
cagggggtgc tctcaacata aagggtcttg tggggggggg aactttgtat cttaccaag 180
aagctgcttt ttgaaacgca cgaacataga acagtggac gagaatatcc cacatgaaac 240
agctacgaac ccttgtaagg ctgtagtggt atcctgtttg caagcaagtt tgaacctaat 300
ctactagtta tattgccttt aagtcaattt acttgcaaga acttctctat ctggaaagga 360
caactcgatc acataaaacc atggaaactt gggactgaac cactgtactg gcgacctgcc 420
ataaagtttt tacaatcgt tcccagcaaa catatatgat aa 462

<210> 883
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E7

<400> 883

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ctcccagact gtcgttggtt agagacttct cgattctcca gatgtgcaa agccaatacc 120
gtgggggtgc gacgtagttc ccagtgttca cacgcggggg agagtgtttc gatgaactac 180
agtccttatt cgataactac cgacaagtca gaaggacata ttgtccccgg tactttttca 240
agatttgagt ttcttgaagg tcgagtcacc ggtccaaccg tcttgaacco tagcatactt 300
gactttacag tgtcgaatgt ttttttttct gcctttggag aatggagagc attatcggct 360
tcaagtatag cgagagaact ggaacacata acaaactca cccacgcgac aatagaaagt 420
ctcaagaaga ctctaccga aaagt 445

<210> 884
<211> 304
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E8

<400> 884

cacgcgtcag ctatagcgtc cagcacgtac cttttgcata atatcaaaac tattaaaaga 60
cgaacccttt atacacaagt acaactaacc acttaacacc cgaaaccaga tgatcttatg 120
ccggcgaggc caattcaggc tgaaccatta tctgtggggg gtgatttaga agacatcgca 180
tatcggttaa aaggccattc aaagcgattg atagcttcta cacctcgaaa gctatatctt 240
tatcgatatgc agtaaagtag aacgtatacg aagagacaga agagacaaac agggactatc 300
atcg 304

<210> 885
<211> 314
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-E9

<400> 885

tttctatggc tgcaatattc atctgcaaag cttgcttcag atcttttctt atgcaacatt 60
tgtttttcaa caacgcacag aaaaaaacia ttttccaagg tggcaaagtt aacaccagtc 120
ttttgtttgg agtgaaaagg aagttccatg cagattcaac ctcgcttttg aaaagcacca 180
atactgtaac ttgcaaatta cagcctaatt tttttaacia cttattaatg ggcttttctg 240
ctggttgat cgctcgctt gtacgagctg gacgaggagt tttgtttaca ctttttttg 300
taacggtatc agac 314

<210> 886
<211> 115
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F1

<400> 886

gcgtccgcaa gcaccagcaa acgacactaa gttgaagaat gcattaaaca tcacctcatt 60
 cttgaacgac ctagcagctg gaggtgtacc tggggcaacc tccaatatgg ctgtc 115

<210> 887
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F11

<400> 887

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 gcagaggata atatgaattg tcaactgagg aaagtgactt gtactggaag agacgggaaa 180
 atcactccct ttgaacatgt tttccttcga ggtagtaaaa taagggtttt tatcgtccca 240
 gatatattag caaacgctcc catgttcaaa agagtggaag ctattaagga aggaaagact 300
 ggaacatgtc ttgggttagg aagaggtcga gggtttattg gaggtcccct ataaaccaag 360
 atacgttgca gaaattaaaa ggggccgaaa cctcccaaaa aaattcattc ttagaaaaac 420
 ctatagacat atatacgccc a 441

<210> 888
 <211> 308
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F12

<400> 888

gcgtcaaaaa ggaaacaaag ctattgcagc agcaacaaca tgtgagattg attcttatcg 60
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 ccgcagcgca tgcaaggatt ttaggacagg gatttaacca caaaagatga gagatgaatg 180
 cctacttatt ttgatgcata ctgcgatgac taggtctctg cgtacttcgt ttactgaatg 240
 tgggtaatgt tcatgctatt tataaagggtt ttctgcttgt tcaacatttg ttaaaaattt 300
 tttttttt 308

<210> 889

<211> 396
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F2

<400> 889

gcgtccgtga aaactttgtc ttttctatct ctttccaaat gtataaacac tgcaactgcc 60
tttttaataca aaaagtaaag atcttcgggt atctcaggag ccaatccatt cgcctttaag 120
atgcgagcta tcttattgcc agtaacttgt ttcacgagag gaacaccttg agagtcacgt 180
agatgaacgc caatttgca aggaactaga ctttttctag ccaacttgca aatcatatcg 240
acaacttcgt tcggtgtcgt ttttaccac gaggggtgggt tccgtttata gggaattacc 300
gactgggcaa ttcccttact atttttatcc ctgaatatat ttcaagtaat cgaacagaat 360
aaacttaccc tttactgtgc atacgccccca tgtttc 396

<210> 890
<211> 263
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F3

<400> 890

gcgtccgcta cgaggtagaa tgattcggct gcacatggat ttaccatgac ttttaatact 60
gtttcgagtt ccgtcatttg ctcttgatg agtttctcat aacataaact ctgttgctgc 120
caggggttg atgacgactc ggcttcttct ccagggggga ccagtcaaag tgctccttac 180
tcgattccgc atgaaaaagt gaggaataaa tatgaaataa ttgttcatat gaaaaacaaa 240
aaaatcgcca aactatcgta aac 263

<210> 891
<211> 153
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F4

<400> 891

gcgtccggaa caagaaagaa cgagtataag gagacaagta agaaaaacga agacggacct 60

aaaggaggag gaggtaaaga tgactaccag acacttatgg tagtacgacg actaatgatg 120
ccgggggggat gacggataat acggttacgt tat 153

<210> 892
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F5

<400> 892

cacgcgtcaa ccaacgcgtc cgggtgtgtt gtgtgattgg ttagaataaa ggcgcctatt 60
ttcaaagagt ccaacctagt gagaaaacat gaatccggaa tatgactacc ttttcaagtt 120
gtggcggata tgcgactctg gagtgggaaa gtcggggggc ttgttgcggt ttgccgacga 180
cacttacaac gagagttata tatcgacgat tggagtatac tttaaaattc gcacgataga 240
actggatgga aagaccgtca agcttcaa atgggatacc gctggacaag aacgtttccg 300
cactatcact tcttcatatt tttttttttt atacggcatc attattgtgt atgacgttac 360
cgaccaggaa tcgttcaata atgtcaatac ctggttgac gaaattgata catattccaa 420
tgagagtgtg aacaaacttt 440

<210> 893
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F6

<400> 893

cacaagaaac aacaactgct gcttctccaa ccagacacgg aatgattggc ataactcgaa 60
tgactctaga ttgtcttacc agctgctgtt ctattgtccc aatcgacact cctgcgcaaa 120
tgggggctag aaggtgtttt tccggtttcc atcgggtggg ttatggactt aagagcttca 180
gagactacat caggctttac tgctaaaacg atgacgtcag catgcaatat ctcaaaactg 240
tttttacagg tcctactcc cattttctga aaaagatcca gacgagactc aactacgtca 300
tagacagtaa cacaagaatt tattatTTTT ttcctttcta taataccccg aatgatggct 360
tctgcaaaac acctccacct aagaaaccca acctcaacgg caaagaacgt tgttccatac 420

cagtgtacaa ctttgc

436

<210> 894
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F7

<400> 894

cacgcgtcag atagaaaatc atggtagaca ctaagcttaa ggacgatgct agtgctgctc 60
tttggacttg cgcctatctt ctctatacag ttgtgttagc attttcagca acaataattg 120
gggttgatgg aaggaaggca gataacatat ggagggaggg cctatattat catggaaaag 180
tggtgaactt ttgtgcatat tcggcttcgt ctgtttttga aggtggcgac catggcgcat 240
gtaaatatgt gatggctttg gcttctatca gcttgatttt acttttcttt ctttggttgg 300
cctcctttgt cgacgcattt tatttttttc ctacaaagtt ctggtttggtg gaacttggtg 360
tcaacatatt ccttaatatg tgggtggttg ttggtgcaat tgtggtgact gcaaagcgac 420
ctt 423

<210> 895
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F8

<400> 895

ccacgcgtca gccaaagcgt ccgggaagta taaagaagag agtgtaaagc ggcgtcataa 60
tagaaatccg aaaggagtag aagaaaagag agagaagaaa gaaaagaaga gaaaaaggta 120
agagagagga ccgaatcagg gtaagaggta taggaggggg aggagaagag agaattgctg 180
gtggagtaac gaaacaagac aagggaagta aaatgtaaga aagaggaaaag gtttacgcag 240
agaatgaact ataaataaga gagtgtaagg cgcgtcata atagaaatcc gacaggagta 300
caataaaaca cagacaacaa agaatttata ttttttccgt actgaaaacc gaatcagggt 360

<210> 896
<211> 311
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-F9

<400> 896

tcaaaaaaaaa tggtgttggt tattcaaaaa aaaaaaatta aaaacaaaat aaatttataa 60
aaaaaaaaaa aaaaaaaca aaaaaatata aaataaatac atatcaaaat gggccgtggc 120
cccatatggt ccatacctta catggctggg tcatgcaatt ttttactcct cctcaaactt 180
taacacaatt tcaattcaca tcctctcatt ttacaacctc ttattttctta aaactttttc 240
ttttttcaac taaactccct tttatcacat ccccttttca ccaactgcct taataccttt 300
tttttttttt t 311

<210> 897

<211> 283

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-G1

<400> 897

gtccgcgacc aagtcggcgg acgcttggt gagcaaataa aacattggaa cgtttttata 60
tgagttgggc aaagcatgaa ctacaaacac ctccatatta cttatatact taatgaaaag 120
gggggggacat ctacaagtag tcaataatac tggggggggg tcctattttg actaccactg 180
aaatataaag tttgcagtca caactctctt tcaaactgcc aaccacggca ttcggtcaaa 240
acaccctttc gtttcactac aatatacacc cgaagtttta ctt 283

<210> 898

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-G11

<400> 898

cgtaaccca cacgtccgaa atattgaagc agatttgta tcacgtacaa aaagaaatag 60
aaaagcaact ggcagagagg aatgtgcaag aagtgattcg ttttgatccg aggctgaggg 120
aaaagggttt gttggatggt cagagtggga aggtggatgt tccggatact atttaacaaa 180

agtggtgtctc tcataaacta tttcacttgt atgtgaagaa caaaacagat atttttttta 240
tcattgaaaa ggactcctat aatttggtgg atacgacaag gaaaatatca cttggcttgt 300
ttttattcga tcgaatcttt gcaattgttt tttggctgca ctgtgcatg gg 352

<210> 899
<211> 421
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-G2
<400> 899

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aagacttttc gagtgaaaaa gccagccac ttactattag tgaagttttt attcttttgt 120
cgcgagggag agatatgatg cgagagttgg aaggcgggag agcagatgaa ttttcaagtg 180
tctttaagaa atttttggaa tatgtacagc gctttgaccg ttacaagggg cttgaagctg 240
caaccaacgt ccgaaacctg ttgcaacgat atgataattt ggatcccttt gaaatggctt 300
gtttggctaa tctttgcctt tttatttta agaggccaaa actattattc caagttaaaa 360
gcacaaaatc gacgactcct cgttgaatca gttgcttcaa gacttatctt ccttactca 420
c 421

<210> 900
<211> 433
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-G3
<400> 900

gcgtccgcga acacgtgggg gccagtttcc tcaggagcca ataaaaaac tttttgtcaa 60
aatattatct tcgaagctga tagtatggag gaaatttgca acaattattt cttcgcttct 120
aggggtgctt tgggcctagg atgcctgaaa cattggggga gaaggtgcgc tcacctggat 180
tgtctgtcac aagaccaagg ggaaagactt acaccagagt acacgtctaa cgagtgtact 240
gttcaaaata tttgtttccc tgagcttgca acggagatat ctcaagatga agtttttagag 300
aactatctac ttgatgatta tttttttttt tccaaccata attttgtgat cgaaagttgg 360

cgttcattcc aaaaagatga tttttcgttg tcagataact tctctcaaga gcaaactct 420
 ttttcacaag act 433

<210> 901
 <211> 282
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-G4
 <400> 901

gcgtccgcc gcgagtcgc ccacgcgtcc gccacgcgt ccgacaacac gtccgcccac 60
 gcgtccgcc acgcgtccgc ccacgcgtcc ggaaagaggc aaatacggga aagcagtaca 120
 agaggaggga gaaaggaaaa aactgactat cacgaggggg ggacggagta gatgacgaaa 180
 gaaagatcaa ggaagtaaca gtaagacaac gagtaatgtg aatgaaagca cgaaagtatt 240
 tgaacaagag agtgtaaagc gcgtaccttt tgcataatgt cc 282

<210> 902
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-G5
 <400> 902

cacgcgtcag ctagagaata ccagctcacc tacttcaata ttcgtagtat aggcgaaact 60
 gttcgtctac tatttgaaga caatggcatc aaatactcg aagagagggt agaagctggc 120
 gagcagtggc aaaaactcaa gcaagaaggt gtgtcggggg gcaagatccc cttttgtcag 180
 atgcctgtat tgcgcgatgg gagcatgtat ttagcgcaga gtggtgcaat acttcgtcat 240
 ttagcgagaa aacataacct ctatggagac acggaagaag agaaagcgtt ggcggatatg 300
 atcaacgact ttgccaacga tctttttttt ccgtacgtgc gcatgattta cagtgatagc 360
 tggaacgaga tgttaccgga gtatttggaa acggccaaga agcaattgga gttattggac 420
 aagtatttga ctcgtcggg 439

<210> 903
 <211> 273
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-G7

<400> 903

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atatcgacta gttcgtacta caacagtttc tttcaagcgt ggattatcgc aagcacttaa 120
gggggatgac gctacttctg cttcacaaac acgggggggt tctactccgg gttcctcctt 180
acatctccaa cgaaataccc acatatgctg tcaagttttc actcaaacct tttgctaccc 240
acctcatcca agtcccataa cccattgctt acc 273

<210> 904

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-G8

<400> 904

cacgcgtcag ggacacatgg cctccgagta tcttgggtat attagaacag agaaatatga 60
caaagagcca agtagacgaa aggaactgat cgttaactgt gagaaacat tcaacgcgga 120
gaggaggccg gatctccttc ctagaagctt ctaggtggga aacgacctct tttttgtaag 180
gaaccatgca cctgtgcctc tggtgaagag tgaagaagag ttcagacttc gagtagaagg 240
tattgtggcg tatccactac ttctctccct ggaggatctc aagacaaagt ttcggaaaca 300
tactgtcgca gcggtgttgc agtgtgcatg aaacagacgt actgaaatga gtcgtatcaa 360
accagttgat ggagttcctt ggttacatgg cacagctggg aacgcaattt ggtctggagt 420
attactcagg gatgtgctaa tagcacctgg cgtata 456

<210> 905

<211> 245

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-G9

<400> 905

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atgaaaatga ctttgaatca acttttgggg gaattggatg gctttaaccc caaggaaggt 120
attattgtaa ttggtgcaac caactttcaa aagtcgttgg acaacgcttt ggttcgtcca 180
gatcgttttg atacgcatgt ggtggttccc taaccctgac gtggaacgtc gaagacagat 240
actcg 245

<210> 906
<211> 350
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-H10
<400> 906

cgtaaaaga aaaagctaga ctacgagaag tatctcagcg ggcataatgcg gaaatggaaa 60
atgtgcgaaa gattgcccaa agagacgtgg aaaatgctag gaaatatagt agcgggtgggt 120
ttgccaaaga cttgttgga gtggcgggga acttggaag agcactacaa aatataccgt 180
cggagaaact cgaccctgaa aaggagacg ctatcgtgat cggtttgtat gaaggggtaa 240
aagctacgaa tgatgtatta cataaagtat ttcagacgta tggattgaa aagtatgatc 300
ctatttgaga gaagtttgat cccaatctac atcaagcaat gtttcaagtt 350

<210> 907
<211> 392
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-017-Q1-E1-H2
<400> 907

cgctccgctat aaatggcatg gaatcataag gcctacacac aaatgactat cagcgcacatca 60
tgaagtgtga catggatatt cgaaaagact tgtatggcaa tgttgactt tctggcggtt 120
cgaggagtgt ttcttggtat tgctgacaag atggagggga gctaatacgc gtttcaccat 180
cgtcaatgaa cataaagatt gttgctccag cggaacgaaa gtactccgta tggattgggtg 240
gaagtatact tgcacgttg tccacgtttc aacaaatgtg gatcaccaca caagaatatg 300
aaciaagcgg ccctgggtatt gtttttctat aatgccttta acagccttgc actgcaatgt 360
gccgtacgtt gaccgacaca attggaacaa ta 392

<210> 908
 <211> 463
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H3

<400> 908

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gcgtccgccacgagtcgc ccacgcgtcc gcgaatgggtg gctataccag tgctggtgct 60
aaagcaacgt ctagtcaaac aggaggaaat gccaaagtctc aagcacaggg atcaagtact 120
ggggcgggct cagatagtgc tttagagtcaa gcacaggggtg gtttggatca ggcagaaagc 180
agtgttcaga gtcaaggctc ttcttcaaac ggaggagact ttggttcact ttctggaagc 240
ttctttcgtc aaggtataca agtaacagct tcttcgaaca attcagagtc ctgctctacc 300
gtgggtcctt ttcagcttga ctctgtattc ttttcgtttg tggaaactgc ggacggcatg 360
gcctatttgc agatttgcag cgcttcttaa atcttctgta tttttgtgtg tttatagtat 420
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<210> 909
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H5

<400> 909

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gatatcacag gaattgttga gttgttttgg aaaaaatgga aaccttggtt gaacaatagg 120
gaggcgggtc ttgcagcat tctcgatagt ggcgggggga cggttatttc gacagggttg 180
ttgaatagat tgatgcttga atttccttgc caaggactcg tttggaaagc acaagactct 240
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gcgaatcgtc gtttattgga ttttttataa tatactgtat atttgctttg ttgtttgtcc 360
gatgatcaac ttaccagtt gttcactcat ttggaagcct tgcacgaaca tttatggaag 420
tgtagagaaa atggaaaatg 440
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<210> 910

<211> 264
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-H7
 <400> 910
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 atccaaaagt gtaccggttg ctggaaaaaa gccattgggt aaagcagaag agaaaaaagc 120
 cagggggata cgtgcagaat cttacagtat ataggggggg aaagtgttca aacaagtcca 180
 tcttgacact ggtatatctt ccaaaccaat gaccatcatg aattcctttg tcaatgatat 240
 atttcaaagg attgcttcct agtc 264

<210> 911
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-H9
 <400> 911
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 ttcttttagc aatatttgct ggtgcaacca cttattttgc gggagatacc ttttacaaaa 120
 cggttaccgg ggagttggac gattcgattc aacagcgaaa agagttttat acgcaaagaa 180
 gagaagaaac cacaaaaaag ttggaagctt tgggagtcgt cgtggacgga gatgacagaa 240
 acacatcttt ataaggaaac tttggtgata tagcttccaa atattttttt ttacacaag 300
 taaaacagtt caaaaacaaa acaacaaaaa 330

<210> 912
 <211> 264
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-A1
 <400> 912
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 aatcgtcgtc gaggaagaa cgacaatgaa gaacaaaagc gggaacgggt gataaaagaa 120

cagggccaag aatatgctgg ggtgactcgc atgttgggaa acggacggtg tgaagcctta 180
 tgtttcgacg gtactccaag gctatgccat attccaggga acatgagaaa gaacgttttg 240
 attaatgccg gagatattgt tttta 264

<210> 913
 <211> 336
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A11

<400> 913

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 gaaagagaga tgggggtcaaa gaaagaagcc acaagtaaac ctgcagcagc agatgctaca 180
 aagacgacag aaaagtctgg tccggaagcc aagttgaagg gaactgggtgc aaagaaacaa 240
 taaaaagttg actatgcatg ttctgttat gttttgtgag ttctgtttta tattttccag 300
 ctattctttt ggtagtgaat aaagagaaaa tttttt 336

<210> 914
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A12

<400> 914

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 agccatttct agacagcgaa cgaattgcac tattaggagg ctcttatgga ggatttaggg 120
 ttctttcgtc ggttatcgaa tatggcagga ggattcgtgc tgctatcgat atggttggaa 180
 tcagtaactt tgttagttac ctgagaaaaa cttcagctta tcgaagagat agccgaagaa 240
 aggaatatgg tgatgagcga gatccgaaa tgcgcaagtt tctcttgcg atatcgctat 300
 tcattctttc tcaccttatt caagtgcctc tttttgttgc agctggacaa aacgaccctc 360
 cagtacctg 369

<210> 915

<211> 351
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-A3

 <400> 915

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 tgcagataaa acactcgggt agcgtctgtt ttcacatcc accagagaat cctctctcaa 180
 aaaaattcct agatattctg ctgccagact ttttcaaggg aaaatcttcg ccgaactttt 240
 ttggcaacaa aagtgaagaa gcaacttcca ctgatgattt tctccgtaa aattttcttc 300
 tccgccaatt tcaacctttt tccccagtaa ctctgaaact ttagtttcca a 351

<210> 916
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-A5

 <400> 916

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 actatggtct gctgcaagta cccgttcttc cgttacgggg tctcctcaag ggttggcaca 180
 actgcatacc tcagctcgcc cgtcgtttaa agtgcaagac gctgatttta tgcgttcgga 240
 tcgtttgtac aagcttgcag tcaaaccccc taaaagtgg aaattgctac tcttttactg 300
 gacgtttgtg tccactgcac tattttttct catattcgtg ggttggtatt ccaacagaaa 360
 ggctggaatt tggtagcaag ctttatttcc ataagatata tagatagatg gatatatataa 420
 tatatgtccg tttggt 436

<210> 917
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-A6

<400> 917

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ttttacaact tgttgctcat agagatcctt ttctctttgt tgactatgct attgaaaata 120
agataggtga gagtgttggt gcagtaaaac aacttggggg agaagatggt cctttctttc 180
gccacaaaca attggagttt atgggtcaag caggttggtat actagtcaaa cagtgtccag 240
aattttcgga aagttttccc gtctttgttg gaatgaaaga cgtttggttg aaagtggaaa 300
tattggagcc aggctgtact ttattttgta aagcaaagtt gaaaggacat ccgagagaaa 360
gatttggtat agtagaaacc gttgcttgga agcaatcttc ggataaaaca acattttggt 420
ctggagaac 429

<210> 918

<211> 455

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A8

<400> 918

ccacgcgtcc ggaggacaag caggcgactc cttgtgtggt ttacgaaaag catcttatga 60
gaaaagataa taggaaagaa accaaccaaa caatgtttgt ggtggtatcg aaggatagtt 120
tttattgccc atgtggtaga aaaagttttg tatctctagg aaataaaaag tttttatttg 180
cacggcgtgt attacgagaa agaagtgggt ggaggatggt ttccaaagac tcggtacaac 240
caccatcaac accttctttg gcaatagaga aagaagaaga tatggtggcg ttgaagaaac 300
aaagaatgaa caagatagaa gatttatattt cagcgggttt cagcctttt gcctatcgat 360
ggaacaagac acacagtgca ttgcaattac aaacaacgta cgagtacttg tctccaggcg 420
aacaagatac cctggtagaa atatcttttg ctggt 455

<210> 919

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A9

<400> 919

acccacgcgt caatgtgggt tgtggagtat gtgcgcttgg caacaaacta aaacatggca 60
 agaagaatca tcggagctta tatgtctgac gctactgtag cgtctctatt tagcatgggg 120
 atgttgttct accttacaat agttgcgggc tctatcacta ttgtgggtct tatgggtaag 180
 agttccgacg gtatttgggt tcacagtgtt ccagcgaaag atgaatattg tgcacacaag 240
 tcttcccttc aagtaaacta ccaactgcata gcttcttatt gcaagtatat catggctgta 300
 tcttttattg gtttggttat cagcttcttc gagttttggt atgcattcct ccgaat 356

<210> 920
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-B10
 <400> 920

acccacgcgt cagcggacgc gtggggggtt attgcgacgc caaactgtct ggaaagcact 60
 taaacccttg taccacggtg gaacactagg tgaaatacaa aacgggggtat tttgcaagga 120
 taatatttat aataaaacac aaggtggtgg tccaaagcct tctgtaactg ggaaaccagg 180
 aaaacttgat ttctcaaagg gaggtccga agccggtcag gcacaaaaag aaggcaaagg 240
 aggagtggct gtaaaagtga aacctaagcg taaaaccaa aaggagaaaa aagaagaact 300
 ttattatatt tggcgagttt tgttgcacaa tgacgatatt cacacttttg actatgtgat 360
 aactgctaac gtaaacct 378

<210> 921
 <211> 362
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-018-Q1-E1-B11
 <400> 921

acccaagcgt caagagtttc ttnggttcga ctccaaacta gtaagcttaa agagactgg 60
 tttgtacata gtcgagcatg gctgggatca cttcanagtt gctcctggat tttattggac 120
 agtccgggtg ttacagtctt tgataattgt aggatcgggg aaatctaagc aagatgctgg 180
 tgcagtgaca caagcaaata aacattcaac aatcgaagcg aaggatcatgc aaacaaaaag 240

caaaaacatg aaggcagttt cttcgttagt tggctcagta cgacaaggcg agtttgattg 300
 gttggaattt ttgtttacat attgtaacct gacggagttt gaagctcgtg aatgtagtga 360
 ta 362

<210> 922
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-B6
 <400> 922

ccacgcgtcc gaaagcagcc agcgggaagag tcatgttggt gtgttttagta ccgaacaatg 60
 tctatggtta tccctgtaaa aggcacaaaa tctcgctata tgcgtctccg aatagcacaa 120
 gaaatggctt tttcaacgat gacacgagta gttggaggag gcgttttacc tacagacgtc 180
 atacagacac aaggacctta tggaaatcag ttgataactca ttctgtaaga atgacgagcg 240
 aacctgacaa aggacaggag tcatcttgca acggagaaga cattttgcag tccattctga 300
 aacgtaagga agtggaagtt gctcttttat aggagaagct ttccagtga tccagtgaga 360
 atccaattgt gaaacgctta gccatggacg gttcttttga accaaaaaat acttttaatc 420
 cgctctgaaa aaaccaac 439

<210> 923
 <211> 362
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-B7
 <400> 923

ccacgcgacc ggagaaaaga agagagtgtg aggcggcgctc ataataaaaa tccgaaagga 60
 gtagaagaaa agagagagaa gaaagaaaag aagagaaaag ccgtactgaa gaccgacaca 120
 ggtacgcgag gagaaaggag acccaaatta aggtgagagg ggggacgata aggaactagg 180
 caaaaggata tggatatctgc ggtagaacat atgaaagaag cagcaccgac tgtttagcaa 240
 aaacacagca ctctgcagaa aagagaaaat gttaaagtata cagtgtgcgg cctgccaaat 300
 agtagagaag aaatcgatga aagttttttt tagtaaaaga tgaggtatag agaatggcgg 360

gt

362

<210> 924
<211> 344
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B8

<400> 924

ccacgcgacc gcaaacgcgt ccgagaatgc actcgaccaa aatgtgaaca agtcgaatga 60
aatattatgt tctttatgga acaaagggtta ttctgcgttg gatatagtac aaacgctttt 120
tcgtagggct cgtagtcacg agatggatga gcagttgggg tcttcaagtc atgaaagctg 180
ttgggaagac gcatatgaaa gtaatggaag gctgtttcag ttttaataaca ttgactgcgt 240
tgacaggcat tctttccgc gcaactgagt ccacgattaa ttgaacaacc aaaaaagca 300
ccagtaccat taagcaatac tatttttttt ttttatcata ctgt 344

<210> 925
<211> 349
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B9

<400> 925

acccaagcgt cagcccacgc gtccgcccac gcgtcagccc acacagtccg tgcatttctt 60
ttctatcctc gccctcggga tatttggtta ttctgacgtt caagcgtgcg agtttgtggg 120
agcgtacaca gtcgataga aagggcaggg gttatctaag aaacttttca acagcacttg 180
catatcgctt tgttcatatg agcagtccac aagactcagc tagtatgaat aacttcaata 240
ttgtcttttg tcaaataccta gccacggata ataaggaggc aaatatacca aaagccgttt 300
ttgtcttttt ataaagctgc tacaacggga gccaaacttg ttgttcccc 349

<210> 926
<211> 371
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C1

<400> 926

agcaaacctc aagtggatca ttccacgttg gaaaagatag acttgtctca aggcagcttt 60
aaagtactcc aagactgtga caaagattta gaatgtgatc ataataggag agtttcagtt 120
ggaacttatt cagtatgggc gcttttcacc tggtttttgg acgagagaaa atgttctgct 180
cttctatttg gagctcgtgt caggtgtatt cataagggac actctctacc ttttctacaa 240
caaaggtgaa gaacatttgt ttgcgagttt aatgctgttg ttggagacac aattctcact 300
gtatgcagac ataaaaacaa actgggagaa acgacacttt atcggtggcc tcacgtcat 360
gtcttttgtgt g 371

<210> 927

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C10

<400> 927

acccaagcgt cagcgttatt aaaagatgat gtgttggtga atagaacaag agtttacaag 60
tcataaaata aatcgagttg gtggcacaag ttggaaacaa cgtgtatatt tcggatttgg 120
tatcgttggt ttatggttgt ttgtattggg ttggcctatt ctggtactcg tatggagtgc 180
tatacttgta ggtcgacaac acgtttattg cgatgaaaac ttggcagatt tggtaatggt 240
ttccgctgga ctttggttgt tattgggttt ctattctttg gttcttttct ttttcatggt 300
tttatgtgga gacattccac accctagtgt agtgagtagt ataggatttc tt 352

<210> 928

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C11

<400> 928

acccaagcgt cagaagctct tccttatatt ctttgtgctt ggaaaatggt tgcaaagact 60
gctctgagtt gcctctttct ctctttcctt atcgctgccg cagttgcagc cgacgtgggt 120
tcagaggaga gatggggata tggtcagggg acccaacaac agcaacagtg ccaacaagta 180

tgtaaacagt atgcatacta tcagagtcca gtctgcactt ccgtaaccac acagagccca 240
 tactggaccc aatgctcgaa gactgtgcaa acctttgtcc caagccagtg cagtacttat 300
 attttttctc ctacatggac ctattgcagc acctacacca ccacta 346

<210> 929
 <211> 241
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-C12
 <400> 929

acccaagcgt cagcccacgc gtccgcccac gcgtccgcac aagacacgca ggttttatacg 60
 gtggagcacg ttgcaaagca ccacacacgt aatgacttgt ggattatcaa acgagggcagg 120
 gttaaagaat tttcctccct tttagaaagg caaccttgtg gcgaacaaat acctttacaa 180
 taatcaagtt aacaacggaa ccttgaattt gacaaggcaa ggcacccaaa acaaacccaa 240
 t 241

<210> 930
 <211> 340
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-C3
 <400> 930

aggtggagcc ttgaggatga atcaagtgat tactaagttg tgtgaaggaa ataaaatatt 60
 tgaatgaaac agtcgttcca gttcaacttt cagccaacaa cgaatgggaa taataacagt 120
 catagccata atcttagggt ggaacaaaac atcaaagact tgaatattgt acctagcgac 180
 agcttattcg acgtggatac ttgttatgat tccgaaaagg ttgttatcca cgattgcctt 240
 actttatgga agagaaaatc gtccaacctt gtcagcaa attttggagt tgatcatgat 300
 gttataaggg gtgtgtatga aggtggcttc aagctttggg 340

<210> 931
 <211> 327
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C5

<400> 931

cacgcgatcc gaatgacttc agcgaccact tgaacgcctt atcaaaaaat actcttcgca 60
ccctcatgaa tacatccacg acaagagtca taaacttctt tccgtcggag cgtgtgatgc 120
aggggggagct tctgcccgcc gtcactaaaa tagtaggggg actgatcatg tcatacacac 180
tcattccacag gacattccca ttgtaccagg gttaaacaca tcaccctgac agttttccgc 240
ctaacgatca tattctagca ttactcacta ctcacatccc cactctactt catgctctat 300
tcaaaccata catgttcctt tttttttt 327

<210> 932

<211> 188

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C6

<400> 932

acgcgtacga tagaaatgta ttcctcatct cgtggccaaa cataaaacaa agtgtttaag 60
tattccaact atcggatatag gagctggaaa atatacttca cgacaagttt tagtatatca 120
cgatggggatt ggaatgttac aacatccaca tcatgcggga gttaccccaa agttttgcaa 180
gaaatatg 188

<210> 933

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-C7

<400> 933

cacgcgtacc gaagtatttg catctttttg gactttggat ttgcaagtat ggggtgtgctc 60
attcagaact gcttctcagt tagttacgca atatgcctag tcataaggaa caaaataaag 120
gaagtggaat atcagctgac ggttacgcac taaagtggag cgggtattcgg ttggacgtat 180
acagcagttt ggtcactatg gtggacgcag acgacctcag agccctcatg tttaaggaaa 240
gcctcaagga aaagtcaaag ctgcatgacc caaaattttt caaaatctat tatgacgaga 300

ataaggacta cttttactat ttttttcttt ttgataataa aatgtttctt tctctggaag 360
 ttgcaccaga atatcctact ctggtgggaa actcgtttct gcagaaat 408

<210> 934
 <211> 318
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-C8
 <400> 934

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 tcgaagacac ccttataata caagaagtaa tcgaatcaaa aaagtgagaa ctcccggagg 120
 gagacggggtt gttcaatatc cgggcaaaaa gggaaagggt cctagatgcg gagacactgg 180
 gaaacccttg caaggaattc cagctttgag accgatagag tatagtagaa tatccaaacg 240
 tcaaaagaca gtcaatccag cttacggggg caatttatgt gccaaagcag ttcgagaacg 300
 gattcttctgt gcgttttt 318

<210> 935
 <211> 276
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-C9
 <400> 935

cacacgtccg ggatgaacta ggcaactaaa aaaaagcact aaactaaca agacaaagga 60
 aaaaactgag tatcacgaac aaaagaggga ctacatgagg aaaggggcat caaggaacta 120
 taagtacgag aagggggaat gtcaatgaaa gcacgaaact attttaagaa cacagtgtaa 180
 aacgcgtacc ttttccataa tgtcctaccg actcaaagag gaagcacaaa gacacacaca 240
 gaactatcca cgtaagaccc taagccactt catctt 276

<210> 936
 <211> 359
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-D10

<400> 936

acccaagcgt caggggttttg tttgacatga tttcgaagct gaaaaaaaaa gctcgagcac 60
caacagagca agaagtggag caggaagcaa aagacaggat ctatcgacgc taggaacagg 120
gtgagctggt gcgatatatg tgggggttcgc ctgtgaaacc accaaactgg tggaagtcgg 180
atgcctttca agaaaattat aagcaattgt gtcacagaca taagcagcgc ctcaagaccc 240
ctgcagagcg aacgctataa gatatggaag aaatgtaaag acctagtagc ctttgggtact 300
ttttttagtg agtaacaatg gtgttgcaac cagttggagt ttccttggtc tatgagcac 359

<210> 937

<211> 347

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D11

<400> 937

acccaagcgt caggcaatac ccaatgcggt tctttccaag ttaaaaaacc acaaagattt 60
gggtgttcat acggaaatgt ttagtgatgg cctcatagat ttggtggaat gtggggcagt 120
taccaattcg aagaaagcta ttaatccggg gcgcattggt tcaggttttt tattgggcac 180
caggaaactg tacgattttg tcgatcgcaa tccactcatc acgatgcacg atattgcatt 240
tacgaacaat ccagtcgtta tcgccaaaaa ttccaagggtg acagctatca attctgctat 300
tgatttggac ctcacaggtc aagtacttag cgatagcatt ggaacca 347

<210> 938

<211> 454

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D7

<400> 938

ccacgcgacc ggagtgttgc tgttgcaagg aggaggagga gctatgatga gttctcagac 60
gattgtattc tcgattctcg ttggtgtatt atttgggtgcc ttgtcctata ttggatatca 120
tcggggaaag aaaccgagtg gtctcttaga ccccgaggag atacagagag ttccgctcg 180
tcgaaaagac agttgtttcg cacaacaccc gaaagtttcg gtttgcactt cccaactcgg 240

aagcaacgct caacttgctt ctgggaaagc acgtctatgt aaaggcaatc gtagataaca 300
 aggaagtatc cagactctaa actttttatct ctcccaaaga aaccaaagga tattttgagc 360
 tcttgatcaa gggtttatcca gcaccttttg ggaccatggt cacgtacctg gattccttaa 420
 agtgtgggga cacggtcctc cttcgcgggc caaa 454

<210> 939
 <211> 322
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-D8
 <400> 939

ccacgcgacc gtaagagggt tggtcatttg ttgagctgaa gagtcaatga acaagcttca 60
 gttgctatac gtaaccaaac aagctgtttc aaaagcatgg caaagagaac agaaaagggt 120
 agactgggag aagaaatcat ttgcagaagg aactttggga gagcaagtgg aatgaaagac 180
 aaactgcaca agagagcgcg tactttaatc ctgaagatga gcacgcagta caaagggttag 240
 caacgaaact tcggcagcaa attgagccat ccgaggaagt actcccccaa caaagaaaaa 300
 gcgtggcaaa aatcctacaa aa 322

<210> 940
 <211> 343
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-D9
 <400> 940

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 acacacaaaa gtgttttgtt gtataggtaa ccaattcttc ttgctccatg tcgaaacggg 120
 aaacagctac cgttcgttct gcagtagcgg ggattttaaa agagtcacaa gagaagaaac 180
 gcaactttgt ggagaccgtg gaactccaga taggactcaa gaactacgat accaaaaagg 240
 ataagcgttt tagtgggtcc attaagcttc catatatctc aaaacctaaa atacaagttg 300
 catttttatg agacgcaatt cacgtacaac aagcacagga act 343

<210> 941
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-E12

 <400> 941

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 atattatcac agtagtttga gtccatcagt agagtttagga ggagtatggc ctccaagggg 120
 gataaggggtg atagaggtat gggagttgcg aatgttgaat acgttgttgt tgttattgag 180
 tggagtaaca gtgacatgga gtcattgagag tatgaggagt ggagagaagg aggagatgga 240
 gaagggtttg atgataacga taatgttggg gataatattt ttgatgatac aaggatatga 300
 atattatgaa tcacagttta ggataacgga tggagtatat gggagtagcg aaacaa 356

<210> 942
 <211> 376
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-E2

 <400> 942

 agcggacgcg tgggttattg agtaatgttt taagggttag tagggatata gataggattg 60
 taaagaggga aattcctgta agaaaagtac ttggtgcctt gtatgcggct atccaatcac 120
 actttaaccg gacacgtggc acacaagcag tggacaacaa cttgaaagaa agtcctgccca 180
 cttacaatct gtccttgctg ccggatagta atggtttggg tcctaaaagg ttttataaac 240
 aagttgacgt agtggaaaga atacctaact tgcactgtgt ctccttggac gggaaactgc 300
 ttcgaacgag aacaggaaag tttctggaaa gtcgctgtcg agagctgtcc ctagtggttag 360
 ctagtgagtt ggaaac 376

<210> 943
 <211> 319
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-018-Q1-E1-E5

 <400> 943

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tgttttgtgtt gtctactgta atactgacaa ccagagctca acctatgact cctcctactc 120
ctccggcttt gaacgactgg aagcaacagc tagaggaggg gattccaaga caatataaac 180
gctctgtgca aggaatTTTT gacaatatta atcgaccagg cacagcaaag ggctgtattg 240
tagcagcaga ttcaaagaaa caaccggact attattataa ctggattcca gatgcagcaa 300
taactatgca agtaattgt 319

<210> 944
<211> 379
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-E6
<400> 944

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ctctgagttg cctctttctc tctttcctta tcgctgccgc agttgcagcc gacgtagttt 120
cagaggagag atggggatat gtcagcaaa cccaggggga gcaacagtgc caacaagtat 180
gtaaacagta tgcatactat cagagtccag tetgcacttc cgtaaccaca cagagcccat 240
actggacca atgctcgaag actgtgcaaa cttttgtccc aagccagtgc agtacttata 300
cccaatctcc tacatggaac tttttttta cctacaccac cactatcgta ccatctcaat 360
gcaacaaggc cgtgaccac 379

<210> 945
<211> 322
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-E7
<400> 945

ccacgcgtcc gaaaagctca gcttgaagaa caaagaactt gcgtggagtt ggacgttatt 60
tatgaacttg gactctattg acacaggaat taatgctcct tttgaccgt ttgcaaaactc 120
ctcacgtgga gaggacgcat cagtaaccaa aaatatgggg catattcgct tgcaacaaag 180
aaacggccgc aagtgcttga cgacgattca agggcttgac acaaaattgg atttgaataa 240

aattacaaag gccttcaaaa aggagttttg ttgcaacggt tgtgtcctag accacgcaga 300
actgggaaga atcatccaac tt 322

<210> 946
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E8

<400> 946

ccacgcgacc gcacacgcgt ccgttccacg tggggaaatg caattaaaac agttgctatc 60
ttcctcacia cgcgaggacg actatgcacg tacttttgac aacaaccatg tttctggata 120
ctgggaggaa aaacaaactt ctcacaactt aattgagggg tcaccttccg aaacggaaca 180
agttacgggt gaagaaacca acgcccccg ccatggtggt caacaacaac atcaacaaca 240
aaacgccaaa agaaagtcaa aacgtactat ttaaacgaaa ataagacatg accgaactca 300
acctggaaga cttgtttgtc cttttttttt tgtttccaaa ccaaaaaaca atcttttgac 360
gaatgctgac ctgttatata gtacgacccc g 391

<210> 947
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F2

<400> 947

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actggattca agtgcggtat caactatcaa gctccatctg tgatcccga ctcagaattg 120
gctaaagttc aacgtgcggt ttgcatgatt tccaacagca ctgccatctc tgaagtcttt 180
gccagaattg atcacaagtt tgatcttatg tacgcaaaga gagcatttgt tcattggtac 240
gttggaaga gtatggaaga aggtgaattt tccgaagcac gtgaggatct tgccgctctc 300
gaaaaggatt atgaggaagt cggcatggat tctaacgatg ctgaaggcga tgaagagttt 360
taatgctctg caaaaatccc tt 382

<210> 948
<211> 209
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F7

<400> 948

cacgcgaccg caatcgcgtc cgcttcccgc cgccctttta ctttaaaaaa actctgttac 60
cttaactctg actacgacgt tcctatctgg atcaaagcaa gtccacctgc gaccgaatat 120
tttcgggaca caagtactcc acaaggggaa agaggagcct tggtagcat tatttccaac 180
ggatcaaggt tccctgacga tgttacctt 209

<210> 949
<211> 368
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G10

<400> 949

cgtcagggtta ttgatgcttg tactgtcttg ttaacaagca aaggagacgc tgttctttcc 60
acgcaaacga ttcagaaaga gttgggacga ttcggagata ttgagcaaat ggtattatct 120
caagatgaaa gacaggcggt gggaaaatat tccatcgatg atgctgcagt gaactgtctt 180
ggagtgtga atttaccaga ggaagccgtt gcttgtgtat ttactgttcg tatggctaag 240
cctcaagacg cgagttttatt ttgtgctgtg gaagaacatt gtgccgacta ttttttgttt 300
aagtagtcac atagaagata gttttgtgga ttctgtcat cgaccgttga tagtttatga 360
cgaattttt 368

<210> 950
<211> 346
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G11

<400> 950

acccaagcgt caggttggta acggatgaac ctggttatta tgaaaacggt gcttttggtta 60
ttcgaataga aaatgtattg ttgggttaaga aagtggaaac accgaatcaa tttggaggag 120

agccttatta tggtttcgaa caggtaggt gttgttccta tggaaagtag attgatggac 180
 ttgagtttat tgacagatga agaagtgact tggatcaata gctatcatga agaatgttgg 240
 aacaaagttt cacctctgtt gaaagaggaa atggcagtcc attggctgaa agaaagaact 300
 attttctatt agtgaacaaa taaatgttgt ttctattttt agtaac 346

<210> 951
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-G5
 <400> 951

cccacgcgac cgcaagtcca ctgaacaatt attgaattta tatgaagact tggcaaagaa 60
 gtttcttatt gtttcttttg aagatccttt ccatgaagaa gactttgatg gctttgcaaa 120
 gatgagggga gtgttgggaa aggactatca aatcgtgggc gatgacttgt tggtcacgaa 180
 ccctactcga ataaagaaag ccattgatgc tggtgcttgt aacgctctct tattgaagtt 240
 gaatcagatt ggcaccttaa cagaatcgat agaagcgaat gacatgagtc gagcaaccaa 300
 atggggagtt atggtttctc atctgtctgg agaaacagaa gattccttta ttgcagattt 360
 ggttgtttgt ttggaaactg gacagattaa gtcgggagct catgccg 407

<210> 952
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-G6
 <400> 952

cccacgcgac cggaggtttt cccgtccttt tcgtatcctt ctgttaaagt atctcgtcaa 60
 ctgttttcag gttttggtct tgcaacaatg gctgctgcaa acacaaagga actagaaacc 120
 aaggtagggg acaggctggg gcaactttac aagcagaggc cttgtatgcc aataatggta 180
 agaatagctt ggcacgacgc gggaacatat gatgtgaata ccaacactgg gggagtaaac 240
 ggatcagttc gttttgacgt tgaacagaag cataaagcca acgctgggtct caaagttgct 300
 ttggatttat tggctcccat cattttttga ctttctgag atcagttatg ctgacctatt 360

ccaattacca agtgtactac ccatcgagta tgcacgaggt cccacgattc cattccgca 419

<210> 953
 <211> 332
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G7

<400> 953

ccacgcgacc gaagggagac acttccgcag cgctttccgc ttattgagca gctgcaggaa 60
 ttccttcgat tgtgttttta cccgcggata agatttcggt tgctcaactc gtccaaccta 120
 ttgcgggtgg cagcgtagtg ttgtcggttg aactgaggt tgatggatgc atgaaagtcg 180
 ttcaacaagt cacgagcgag tttcctatct atttggcgaa ttctatgaat tccttgagat 240
 tagagggcca gaagacggtg gctatcgaaa ttgcacagca gtttgattgg caagtttctt 300
 gattgggtag tagttcctgg tgtttttttt gg 332

<210> 954
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G8

<400> 954

cacgcgaccg gactttagac aattgccacc ggaaggagaa cgcttacaac agtggagagc 60
 agaacaaccc gaaagaatag agcgaaagag gagagaagag gaaagtaaaa gggaggaaat 120
 tcgtggagct gcttccaagt atatttctga gttttggggg aaaagagctc aagatgtgaa 180
 cagaagaaag gaagagaatc gagcaaaaga taaagattgt tacaaggacc aatttgttga 240
 caaggaggac gaggtggaac ctgccgaggc ttttgactat gttttgggag gaaaaggccc 300
 gcgtttgtcc gcacgaacgg attcttttta tgatacaagc tctggtagaa ccaggacgca 360
 gaaagaattg aagagaatgc gagagtcgat gcaaagctat aaacaacacg tggttggtga 420
 ataagagaca cc 432

<210> 955
 <211> 355

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-G9
 <400> 955
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 gtactcgagg agaaaggaga cccaaattaa ggtgagagaa tggacgataa ggaggtatgg 120
 agaaaggata tggatatctgc ggtagagcat aggaagaag cagcaccgac tgtttagcaa 180
 aaacacagca ctctgcagaa aagagaaaat gtaaagtata gagtgtgcgg cctgccaaat 240
 agtacagaag aaatcgatga aagtgaaagc gagtaaaaca tgaggtatac agaatggcgg 300
 tcctattatt atggatccaa aggtagcgaa gtaaataagac gtttgaaagg cgtcc 355

<210> 956
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-H11
 <400> 956
 ccacgcgtcc gtgtgtccga aattatttcc aaaaataaat aaatggatca tgttctttat 60
 tgaaaaaac aaaaacacac aaaacaaaa aaaaaaaagg gacccggacc accaaacaac 120
 caccaacaca gggcacgggg accccccctc aaacaccccc cccacacccc ctccccctcc 180
 atcacccac ctctctccct cctccccctc cccctatct cctcctccc cctccttctc 240
 tcccccttc ctccccctc cccccctccc cccccaccc ccacctccc cccccccct 300
 tttttttttt ttttctccc cccccctc cctccccca ccttcccc cctcccccc 360
 tccctattcc ccccccccc cctccccctc ctcatctct cccccccctc tctcccccc 420
 tcccccc 428

<210> 957
 <211> 456
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-H5
 <400> 957

cccacgcgac cggagaaata agatgaggat ggatgtcgac caagagacga caagtggaaa 60
gcgttggaag cagcataagt ttcaagctag tgggtgggtggt agtgctcgaa ggagtcaagt 120
aactcgtgtc caagtcacca acttggcact cgggtgtgagg aacaaggata tcaacgtaag 180
cttgtctctt tattcatttt ttgtggctct ttggagggtg ttgttggtat ttaccattgt 240
atactggaaa attgtttggt tccggaatat ttcgttgtag ttcgactgct tacatcacc 300
tcctccttct ccgcctcttt ggtatgcatg acgttttcgt tcctcacctt ttgtttcagg 360
acctcttttc tgaaattgga aagttgcgcc aggcctttgt aaagtttgac agaaacgtcg 420
ttctacgggc agtgcagaag ttgttttcaa cgaccg 456

<210> 958
<211> 388
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-H6
<400> 958

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taaacgctta tgcttcaaaa caagactatc cacttgtaca acttgtcatt gctcttttcc 120
agtctggaca ccttcgttcc tcggtaatca acttttagga cccaaagttg gctagagctt 180
tggtatacat aaccctagct ccataatat ggaacatatt ggctagggtg gagtatttct 240
tccacatcat cagtttctctg tttcgtggaa aaagaacagg atgctacgct ttggcgctat 300
ggatcgtact ctttagccta tatttttacg ttttggtgat ggaagctatt caggcacagc 360
ctactctcaa gctcttgga cacacca 388

<210> 959
<211> 384
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-H8
<400> 959

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cttaggaac tcttctgagt gaagtcaagt tcttcttct cgtctaactg tcgtattgga 120

gggctgggac gttcctggct gaaaggcttc tccgtagggc taactttctt cagcaacgct 180
 atttcacctt ataaattctt tacctttggc tcttcttggg gtgaactgct agtgtccttt 240
 tgatcctcct caccgtaacg gctgttctgg atcgaagagt tctccacact actactattg 300
 tctctgtggg ttaaacagtc ttatttatct tgcagtatat acctgctgct tggtttcagt 360
 aaatcatcat ccacagtttc tttc 384

<210> 960
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A10
 <400> 960

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 ggcaagggtgt tatcgttata tcaagaacaa accatacccc aagtctcggt tctgtcgtgg 120
 tgtcccagac cccaaaatac gaatttatga cttgggtaaa aagaaggcag gggttgaaga 180
 gtttcccctt tgtgtgcatt tgatttccga cgaaaaccag caaatatctt cagaagcgtc 240
 ggaagctgct cggttgctt gcaacaagta catgacaaag catgcaggga aggatacttt 300
 tcacataaga gttcgcgccc atcctttcca cgtcattcga attaataaaa tgttgcgtg 360
 tgctggagca gataggttac aaactggtat gcgtggtgct tatgggaagc cgcaaggaac 420
 ggt 423

<210> 961
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A11
 <400> 961

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 ctcaagttac agaaaagact agcagcttcc gttctccatt gtgggaaaag aaaagtatgg 120
 ttggatccca atgagacgag tgaaatatcc atggccaact cacgtacgta tccttgtgtt 180
 gtttttacct tttggtgaac tgtgtccaaa ttatgatagg tcagaacatt cgaaaactag 240

taaaggacgg attcgtcata cgcaaaccag taacggtaca ctccagggca aggtttcgtg 300
 ttcgattaga ggcaaaacga aagggtcgac atagaggacc gggaaagcgc aaaggtacta 360
 tgaacgcacg tctgccgcaa aaaaccgtgt ggattcacag aatccgagtt cttcgcagac 420
 tcttgaagaa atacagagac cagaac 446

<210> 962
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A2
 <400> 962

cacagctcaa cctatggacc ctcccactcc tccctccttt gaacacgtga agcaacagct 60
 aaaggaatgg attccaggac aatatacacg ctctgtgcaa ggaatttttg acaatattaa 120
 tcgaccaggc acagcatagg gctgtattgt aacagcagat tcaaagaagc aaccggacta 180
 ttattagaac tggattctag atgcagcaat aactatgcaa gtaattgtaa gcatgtatga 240
 gagggcaaca gatcccaaag agatcgatag actggagact attatcaagg aatacatagc 300
 gtttaatcac aaactacaac atactccaga ctacaatggc aacttttata cagatggttt 360
 aagtgtctgt catttttcgag tacatggaga tgcatactct ggaggatggg gcattgaaaa 420
 tgat 424

<210> 963
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A5
 <400> 963

aggtcgcaaa ccaacttata ctgttggcaa gatgttggct tatcgtcgcg aaaaaacatt 60
 atttgtttcc tcgtttacac cttgttctca cgccaaattt ctgtcaagta taagaagaac 120
 gaacctttca atttgtagga aaacaaccag caaggagtgt ggttacgtgt tacgcatggg 180
 cgcagataac ttgaagtttt ggaaagattt ttgggctggg ggctttcctg gaggagaagc 240
 ttatttgaag gaggtgatag agagtaactt tcaaaagcca gttccaggac tcgatactag 300

tggagtaacg ggacaagggg aagaaaagaa agcagttggc aaccgaacac agcagcctgc 360
 caaagcttct tcgggaaaag actccaaccc tccttcttcc aataatggca ctgccaactt 420
 g 421

<210> 964
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-A7
 <400> 964

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 tacatgcaaa ggttgacagc agtccgcagc ctaatgaagg cgatcccgga tatagcagtg 120
 taagaacaga tcgcagagat acggaagaca agtctaaaca cacgcagaat gaaagccaca 180
 acggattcga ttctgcctca cacgagaaaa agcattcttc aagacgttcc ttgagctcct 240
 ttttgatgga gaaacttaca aaaattgccg ggccgaaaca agcgaatctc gggaaggaga 300
 ataagtttta ttatgatgag aaactacgta catgggtctg tgacgatgga gatgagagca 360
 acgaagaagt tcaacnnaca cgcactctag aacctcagat ggttcgcaac attcttcgca 420

<210> 965
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A8
 <400> 965

ggttcttcga agaaagaaac ggatgacgtg gacagcgata gtgacataga ctcgagtggt 60
 agtgacttgg aagataatga gaccagttgt cccgagcaag ttggtgcggt tgctggttct 120
 tctgtcgtga aaagcggcat ttttgtgtag agagtgtgta cagaggtttc ataccagccg 180
 tgtctatttg tgggtgtgtg gtgtacatag ctgtctatgt tttggtgctg tggttggtctt 240
 actttttgct ttgtgtgttc cgaacaagtt ttatcgttgc tggcagtata tatcttcac 300
 gatggatgta tatatcccaa attttgtttc gcttaaatac tgtgcatcga tatacttggt 360

tcgtatgatt ggatatagtt gctttgtttt gctacaaaat acggagagaa taaa 414

<210> 966
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-B1
 <400> 966

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 caacaaagca aaggggcaca gaacaagaat ttttgctatt ccagaaacaa gaatagaaac 120
 tgcgcgactg tgtttggatc ataaggggtca tatctttcgt agctcggtcg aaagccaggt 180
 tctggttgct gcctaaaaaa gcgttttcgt gctaaaagca caacaagcca gtcgtctggt 240
 gcttgctgga cgaccgcaga ctgcacagtc caaagtttta atacgactat ttcgtgaaac 300
 gattttgcca aattttttgt gaaaagcctc tagacgacta gagccgttga atcacgaagc 360
 ctctgcttca gagtggcatc tttcattgag cccactatan gactctccca acagaagcca 420

<210> 967
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-B10
 <400> 967

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 aagagaaaag ccgtactgaa gaccgacaca ggtactcgag gagaaaggag acccaaatta 180
 aggtgagaga atggacgata aggaactagg caaaaggata tggatatctgc ggtagaacat 240
 atgaaagaag cagcaccgac tgttttagcaa aaacacagca ctctgcagaa aagagaaaat 300
 gtaaagtata gagtgtgcgg cctgccaaat agtagagaag aaatcgatga aagtgaaagc 360
 gagtaaaaga tgaggtatag agaatggcgg tcctaacggt aaggatccaa aggtancgaa 420
 gtaaatagac gtttg 435

<210> 968
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B11

<400> 968
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 tctagaaaac ggctgttctt actctaagtt ttccgagttc ttccagcccg ttgcctctgt 120
 ttatccagag gaatttgagc tgttgcataa acaactccaa caactcttag atataagact 180
 aaagcaagaa tttcagttat tgctcgaaga taaagatatt gcaactaaac tcgagggttg 240
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 tgaacaaact ccatccgaat ggatcaaagc tgtagcagta aaacaaaaac acaaattgaa 360
 agaaacactc tgtgaggaac gggatgagtt gctcaaggct gtcaaagacc tcgaatgtaa 420
 agtatccgac acgcgacaaa aaggcgacaa a 451

<210> 969
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B12

<400> 969
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 gaaataagat tccttgggct atcctatctc gcagtttgag agcgcacgta cccgaaagga 120
 tgggaatgta ttctactcta ttcaatgcca gtcaatgttt tccagaaatt ttggtttcta 180
 ttgttgcaga gaaattattg gctcgtttta gtagacaaac gacgatattg gctatgggag 240
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 tctctttttc catatccaaa agtaacataa tacgctttct atctccaatg cgacgtattc 360
 ccatatcttt caggctcttg tccgtcatat gagataagac ttggccatca atggcatgat 420
 caagaaatag ctgagaat 438

<210> 970

<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B5

<400> 970

cccacgcgtc cggtcgtgca acgttgattt tgttgtttct tcaacatagc cttgtgcaaa 60
gtgtgtcttg taaacggata caaactcaca aaaggctgag tttccagtgt ataaaacctt 120
ttcaaaagca gtgtttttctc agtaatctta ttgataaagg aaaaaactct actcgtcgtt 180
ttacgttgag gcagtttgga agcatgagtg agacggtgtc ccgtgttcgt cagttgacag 240
agaaagggtgc caagggtgaa ggctggaatg actgttgga ggcaggcttg acaccttggg 300
ataggggttc ttcattacct attctatgtg aactttgcaa ggaagatgcg tttcctaagg 360
gatatgcttt ggttccaggc tgtggccgtg gctatgacgt tttgactctt gcctc 415

<210> 971
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B6

<400> 971

gcatgttatg cactttgttg taaagcaaaa ctggttcaag taatagaaat atgtagacac 60
ggggatcggt cgccactgaa cacttatccc aacgatccaa aaccttacca tctctggcca 120
ggaggccctg gacagttgac agctgaagga atgagagctc atttcgaact tggaaggcaa 180
cttcgccgac gatacgtaga ttcagggttt cttgacaaaa atctgtccgt caacgaggta 240
gcttcagctc cttgcggtga agccgtccca tctgatattt ttatgggtgc tatagggttaa 300
agttgtatcc agcgataccg atcgtactct catgagtgtt tattgtcaga tggct 355

<210> 972
<211> 426
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B8

<400> 972

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 agttcttaaa agctctgata tggaacaatc aaagctggaa aagacttttc agatagccaa 120
 agaggctgtt tccaggttca agttggagaa ggatattgct gcatttatta aaaaagagct 180
 ggacaaaaac tttgatgtat actggcactg cgttgtcgga aagagcttcg gttcatacgt 240
 gactcatgtt agtggcgcat tcgcctactt ctacgtggat aagcttgcag tgatgggttt 300
 caaagcatag catagcctta ataaaatgac gttgatggca gttttgtaaa aaaaaaaaaa 360
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420
 gggggg 426

<210> 973
 <211> 427
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B9

<400> 973

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 gagtagcgaa acaagagaag ggaagtaaaa ggtaagaaag aggaaagggtt tacgagagaa 120
 ggaagtagaa agaagagagt gtaaggcggc gtcataatag aaatccgaaa ggagtagaag 180
 aaaagagaga gaagaaagaa aagaagagaa aagccgtact gaagaccgac acaggtactc 240
 gaggagaaag gagacccaaa ttaaggtgag agaatggacg ataaggaact aggcaaaagg 300
 atatggtatc tgcggtagc ttagaagcag caaaccagag aggaaagcgt taaagcatga 360
 aagaaaagaa atccgaaaaa gaagagaaaa aggtaagaaa gaggaccgaa tcagggtaaa 420
 ggaagag 427

<210> 974
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C11

<400> 974

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ctataggcag acagaccgac attccgcaac gactgtatta tcctcccaaa gtggttatgt 120
 cttcccattg agctgacaac caaacatacc cggaacctg actcttttct agaccatctc 180
 tataccaagc caaccaatcg gtatgcaagt tcttcaacac cactctcaac tcttcacact 240
 gcaacaaggc agtcaaacca ccaactacga cttcccattg tcttgcaacc gcggcattcc 300
 caacgagata ctgtagttgt tgacgtacta gtctataata tttgatattg ttctgcttgt 360
 tgctccagga ttcgttttca atgtcccaag tgttcttatt ttgccacgta gacaacctgt 420

<210> 975
 <211> 415
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-C3
 <400> 975

agctttacac gaattttccg tggttctcgg cacttgcattg agcatactgt tattgggtgg 60
 ggtacttgga ttggtctatg tgctcttgcc tggattattg catggataat atcagaagtt 120
 attccggtat ttaatgacct tcttggttta gtagcttcat tatttgcgtc acaatttact 180
 tacggcttgt ctggttactt ttggttattt gataattatg ggaagtggcg tagacatccc 240
 atcttgacag ttatcaactt acttgtgttt ggacttggtt tgactattct tggctcttgg 300
 atgtatgcct cagtgaagag catcatagtt tcgtaccaa ctggtcaagc aggtacgcct 360
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<210> 976
 <211> 250
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-C4
 <400> 976

cgcgtcagaa aaaaaaaaaa taaccgtaag aaaaaaagca aataaaaaaa aaaaaaaggc 60
 aatcgggtgca agaaggatc aatggtacta taggctcgac cctaaattaa gtcacggcta 120
 agatcatcaa atgagttcag ttcacagggc atcacttgaa atcgtagctt cagggaaaac 180
 cctagaattt tccaacttta tgggctggta acgtttggcc cttccccc aaaggggaatt 240

tgcggaaaaa

250

<210> 977
<211> 332
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C6

<400> 977

agggaatttg ctgatgatgt cctcgctatg tccttttttt tgtccccaag catcaagtaa 60
attgtagacg tttataagcg atgcaactta ttaaagtttc tttcttgagt gcaaaaaaaaa 120
aaaaaagaaa aaaaaaaaaa gaaaaaaaaaag taacaagtta agaacagaaa ctaaatatga 180
taatatgcag ttaaaaagaa ataaaagatg aatcaataaa aaaaaaaaaaag gggggccgcc 240
caaaaggatc aaagggttaag taagggtgaa aggaaagtta aaacccttca aaaggggaaa 300
caaaattcaa ttcaaggggc gttgttttaa aa 332

<210> 978
<211> 266
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C7

<400> 978

agaaagtttg gttgttttct tggtagcagt tgtacattca acatcatcaa atgccaaagg 60
gaggaaagaa agattcttca aagaaagaag ccacaagtaa acctgcaaca gcagatgcta 120
acaaaaacga aaaaaaaatt cgggccggga accaagttaa aaggaaacgg ttgaaaagaa 180
ccattaaaag tttactaagc aagggtcccg tggtttggta attccggttt gataagttca 240
agccaatcct ttgggaatta attaag 266

<210> 979
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-019-Q1-E1-C8

<400> 979

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 tgttttcttc gtagctcatg cagttcccgt tggagaagat gcattcagtt tcagtcagac 120
 ttttggaat gcttctgctt caggcaacgc ctctgttatt ccagctacaa ccaagatccc 180
 caagttagaa gtaactagta gtgcctcatc aaaggacaat ggaaaagcag ctcaagtaga 240
 ctttgcagat tactcaaagg gatatccttc gcctagctat ttttacgctc cttcttacac 300
 atcctatgtg gaatttcctc aatatccatc ctatccatca tggccttctt ttaatgagca 360
 gcctgccttt ggtggcttcg atcccaatgc agagtgttga gagtctgana ttttcgtgtg 420

<210> 980
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-C9

<400> 980

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 ttggaagaa atgaaaaact caaggaaaag ggttatcaag tacctactgc gaggaagaca 120
 ggtactacca tagttggggt cgtctttcaa gatggagttg ttttgggagc ggatacaaga 180
 gccacatctg acactaccgt atttgacaaa aattgtgaaa agatccacta catcgctcca 240
 aatatttatt gttgtggcgc tggtagcgct gcggatacgg aaaacacaac agcgcttatt 300
 tcttctcaat taaaattaca tcgactgaat tcaggtcgtg aatcgagagt tactacagcc 360
 cttactttgt tgaaacgaat gttgttccga tatcaaggat atgtttctgc cgcacttgtc 420
 ttangaggcg tcgactttta tggaccgcac 450

<210> 981
 <211> 430
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-D10

<400> 981

gtcaagtata agaagaacga acctttcaat ttgtaggaaa acaaccagca aggagtgtgg 60

ttacgtgtta cgcattggcg cagataactt gaagttttgg aaagattttt gggctgggtg 120
ctttcctgga ggagaagctt atttgaagga ggtgatagag agtaactttc aaaagccagt 180
tccaggactc gatactagtg gagtaacggg acaaggggaa gaaaagaaag cagttggcaa 240
ccgaacacag cagcctgcca aagctttcttc gggaaaagac tccaaccctc cttcttccaa 300
taatggcact gccaaacttg caggtgggtg tcaggttcgt ctagtaacag acccggtcac 360
aggaagaagt cgtttggaag tcgtaccaga ggaatagaca ataacttact tagttggtat 420
tgtgtacctg 430

<210> 982
<211> 323
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-019-Q1-E1-D11
<400> 982

aaagaggttt gactatacga aaccttataa tggctatgtt ccaccagaga caagtagatc 60
taccagaatc atgactagag ccatgggagc ttttttctgg tttttcatca tgttacgtgc 120
caagtacgac ctacctaaag gaattaaaag ccattttgaa gagaaaagag aagaagagga 180
ggaagaggaa gccttgaaag aaggtggaga actttttagt tttgttgctt ggcggcaaag 240
gggtactttca acttgtgtaa acaactgttg ctgccttgga gtgtttgctc tttaaacaaa 300
gcagtcaatt tttttccttt tcc 323

<210> 983
<211> 450
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-019-Q1-E1-D12
<400> 983

cccacgcgtc cgcgtaaata ttgtggcggg gggctccgtg ggacgcttta aaatatttac 60
acaaactgtc tgtaaaccct aaactgcaga cacatggaac gtggtatgaa agcatccaag 120
gcttttctcg aaggcacggt caagagtagc accaccgaag taactataaa agctgcggaa 180
attgtaaact tgggtgtcac tttggacttg ggcgtccgca acttggaact gaaacaaatc 240

gccattaaag caagaaatgc ggaatataac ccaaagcggtt ttcaagctgt catcatgcga 300
gtaagagagc ccaaaacaac cgccctcata tttagttcgg gcaagattgt ggttacgggg 360
gcgaaaagcg aagaagagtc caagcgggcc gccaaaaagt ttgtgtttat cgtccgaaaa 420
tgtggatatg acgaagcaaa attttcagag 450

<210> 984
<211> 85
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-019-Q1-E1-D2
<400> 984

tcggtaccat tttccttgcc cccaaaaaca aacctgaacg gtcctaacg gggcattgaa 60
aggcattgaa aaaagattac aaacc 85

<210> 985
<211> 421
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-019-Q1-E1-D6
<400> 985

aaagaaaaga agagaaaagc cgtactgaag accgacacag gtactcgagg agaaaggaga 60
cccaaattaa ggtgagagaa tggacgataa ggaactaggc aaaaggatat ggtatctgcg 120
gtagaacata tgaaagaagc agcaccgact gtttagcaaa aacacagcac tctgcagaaa 180
agagaaaatg taaagtatag agtgtgcggc ctgccaaata gtagagaaga aatcgatgaa 240
agtgaaagcg agtaaaagat gaggtataga gaatggcggg cctaactgta aggatccaaa 300
ggtagcgaag taaatagacg tttgaaaggc gtccagtaag aaaggagacc caaattaagg 360
tgagagaatg gacgataagg aactangcan aaggatatgg tatctgcggg agaacatatg 420
a 421

<210> 986
<211> 346
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-D7

<400> 986

ggccagtgtt cctttccagt gtgcaaaata tgttttctcaa caagccaaac aagacaaggt 60
attctgtgaa atataaaaac ggcaaagtcg cacttaaagt aacggacgat caagagtgtc 120
ttcagtttct tctagacccc aaatatgatt ttgaaaaact ggaaaacatc aatgcctggg 180
ttctgtctaa catgtcccggt ttaccgacgg aacagagttc tgtgtaatac agctttctttt 240
ttgggtctta ttttttatat ttgaaatgct atatatacaa taaaaacagc gctagtgata 300
agaaatgctt tgaaaaaaaa aaaaaagagt aaaataaaaa aggaaa 346

<210> 987

<211> 361

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-D8

<400> 987

cccacgcgtc cgcccacgcg tccgcccacg acgtctgcgg acacgtgggc ggacgcgtgg 60
gttgatgagg gataggacaa gagttcagta tcgtgtaagt tattegctta tgagtgttcg 120
cctcagcttc tacaaaatta tattagcatt ttcggctact aggattgacc tgggtgggcg 180
tacagtatac aatgtatggg atgacagctt aatcgatgac ggtatgtaca ataacctttg 240
tggggactca gcctctacag ttgtagaacg aggggagcat ggagcgtgta gatatgtcat 300
ggagttgggtg tctataagtt tgattctagt ctttttcttg tggcttttta catttgtaga 360
t 361

<210> 988

<211> 446

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-D9

<400> 988

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aagcagaaga aataaaagtg caaaacgcta cgagacggaa acaccacac ggactccgaa 120

gggaggaaat actacgacaa caccgccaaa ttgcaaagtt gtacggactt taccccgttt 180
 ccgccatcta catcgtgttg cttgtcgccc tccagtggct actcgagta tactttacca 240
 agtactttcc ttggtacctt tggatgttgg caacgtatgc cattggtgca gttatcgacc 300
 atgcgttgtg ggtacttatt cagcagcta cccacaactt gatattcaat tccatagcgg 360
 ctaaccgtgt catgctttgt attgctaaca ttccccacgt cgttccttcc gggatgatgt 420
 tccgatatta tcacatttta caccac 446

<210> 989
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E1
 <400> 989

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 aaggaagtgc gaataaagta ggcgttggtta ttgttacga taaaggtgat attcttgcca 120
 atgtacgtcg tacctacgtt tcgccacctg gtcaagggtt tctaccaaga gaaactgcaa 180
 aacaccatca gcaacacgtt gtccctttaa tagcggaagc actgaaacaa gcaaaaattg 240
 atcccgaaca acttgattgt gtttgcttta ctcaaggacc tgggatgggc ggtccacttt 300
 gctcagttgc cgtagcagct cgaacagttg ctcaagttatg gaagaaacca ttgattccag 360
 tcaatcattg tgtagcacat attgaaatgg gtagactagt cactggcgca agtgaccct 419

<210> 990
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E10
 <400> 990

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 ccggaatagg ttcacaaggt aatttttttag cagtcacttg gtttcgtgac agtggaaaac 120
 cgcagtgaaa agtttggtga tcaatacagt caatgtagaa caacaaaatt atctgacaag 180
 caccatttgt tcaattttgc gtgtgttgtg aaagaacagt tggagtgtgc aaagtaccaa 240

tacagtcttt ttgatgtatc ttttgctcaa aaagaaaaaa aaaaaataaa aagtcaaaaa 300
 aaaaagaaaa caaaataaaa aacagcaaaa aataagaaaa ttaagaggaa aaaaaataag 360
 aaacaaacaa aatggggcgg ccgccccaaa ggttccaacc taacttacgg ttgcaagca 419

<210> 991
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E11
 <400> 991

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 ttaccgtgtt cctggtgctc ctcaagcaga ttgggtagat atttacaatc gactctatcg 120
 cgaacgtatt atattcttag gacaagagat tgacgacgag atttcaaacc aaatcatagc 180
 ggtaatgctc tatttagact ctgaagataa taccaagcct atatatcttt atatcaactc 240
 tcctgggggt tccgttattg ccggtttggc tatttatgac acgatgaagc acattgcttc 300
 cgaagtgtg acggtcaacg taggcttggc agcctctatg tcttcctttt tgtagcggc 360
 aggtgaaaaa ggaaaacgtt tagctcttcc tcaactcgca gtaatgattc atcagcctat 420
 ggg 423

<210> 992
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E12
 <400> 992

agatttgagg tggggattgt tcttaagaat ccccggaagc acctcggaac gagacgcagc 60
 gttgtctcgc tatttcagcc aaagaaatga atcacatatt cgatagaaaa ctttctcatg 120
 gcaacaataa agaacgaacg cccttttctg cagtatactt agcggctgga ttatcctcgc 180
 gtttcggata tcgcataaag tgtctgcagg aagtcggcag gttgggagaa acgcttctcg 240
 aactgtccat tcggcaactc gcaaaatatg gattgagtga tgtgattatt gttgtaagtc 300
 gttcaactta tcccaagggtg cacctcggtg caggagatat atttcaggga ataccagtca 360

cgtactgctt tcaagaaact cctagttaca gaaaaaagcc gttaggaact gtacatgctt 420
tactttgtgc aaaagatgtg gtggat 446

<210> 993
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-E3

<400> 993

cccacgcgtc cgagaatatg tattttcttg ttctcgttac aaaatatttc taccaacgga 60
atcgacgatg atagcatttg cacttgaata tgttcgttgt ccaccgccat cgaaaaaac 120
tttgtcaact actagtaccg atgatatagg agatgcagct ctgtattatg ccagagacaa 180
tattcttcag agagatgtgc aagtgagttt tacaacggtg gaccgagttg gcacctttat 240
tggaagatg aaactgttgg agcgaagcac tagtagcacg gatgaattgg aatgggaaaa 300
ggccctgttg gaacaagggt taggttatct caatgaagtt atctatgaca aagctcctat 360
gactctaaag gaacaggaaa aagctgccaa gcaaagtcgt cgaggtctct gggctactac 420

<210> 994
<211> 107
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-E4

<400> 994

taagtatttt ccggttctcc ctagaaaata tttccaccaa ctgcatccat tatgacagca 60
tttgcgactg gagatgttcg ttgtcgacgc catcgaggtg gacttgg 107

<210> 995
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-E5

<400> 995

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aaccgttttg tttggttgca cgtatcgaac tttctctagt gtggaaatct cgtagagtca 120
 attatacaag gaagaaaacc cctggtaaca cgtggtaagg tgtgactcca tggagccttg 180
 gaaggaaagc tccagcacac cctctacgga aaaggggact tggaaagaag agccttcgag 240
 ttgttttgaa cagcactcaa gtgcaactat agaagaaacg gaggataagc ttgcaaaggg 300
 ccgaaaagta ataggggtcgc ttccactaga tgcagaaacc gatttggtccg aagccacaaa 360
 atagtttcat tcattctgaag cagcaggtat ttctgcgtta gctgctttag ca 412

<210> 996
 <211> 138
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E6
 <400> 996

ggcatggaac aagaccgact ataccagtat ccactggtgg aagttgcaaa tcacattacc 60
 aaaaaggagc cttgatttgg gttggccgga aaatacatgg acttaccctcg tttccggaca 120
 aacatccggg tggagaac 138

<210> 997
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-E7
 <400> 997

cggacgcgtg ggttgatgga caaacctcaa gtggatcatc ccacgttggg aaagatagac 60
 ttgtctcaag gcagctttaa agtactccaa gactgtgaca gagatttaga atgtgatcat 120
 aataccaagt ttcagttgga acttattcag tatgggtctct tttcacctgg tttttggacg 180
 agagaaaatg ttctgctctt ctatttggag ctctgtgtcag gtgtattcat aaggggacact 240
 ctctaccttt tctacaacaa aggtgaagaa catttggttg cgagtttaat gctgttggtg 300
 gagacacaag tttcactgta tgcagacata aaaacaaact gggagaaacg acactttatc 360
 gtttgacctca tcgtcaggtc tttgtgtgag gaatatcaac gacagtattc agagcta 417

<210> 998
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-E8

<400> 998

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 aagttgtatt cgagtggaga taccgccgct ccagtgcctt tgtgacgggc actttcaacg 180
 actggaatga tttgttacca atgtcgcggt tccaagaagg tgaagaagag gtatggagag 240
 caaccaagtc ccttccagaa ggtgtctatc agtaciaaatt tatcgtggat aacgtatgga 300
 gatgtgcacc agatcaacct tgtgtaaaag atgaacgcgg tatcttgaac aacattattc 360
 acgtgagtta tgatgaatgc gacgataaat attgcttttg tcattcaaga actattgcga 420

<210> 999
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-E9

<400> 999

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 atattttgac acgctctatt ctttatctca agctgtgtac gaatagtcgt cgtcatcgtc 120
 acgatagttt tacaaaggaa acaacttga gtagttctat gtgggttaagg aatatgggat 180
 ggaaggtgtg gcagtcacat gtcaaagagt gggaattgga ttcgatatcc aaagtcaact 240
 atattgttca tcgattggat tatcttattc aggatatatt tcatgtttta tgtctcaatc 300
 gaggaagca acgtagaaga ctgcttaatt tattaagttt tgtggagcca ctttatatgc 360
 agtcgattgg gaacaaagaa gaaacggcag caacgaatcc tctgtcttta tttattcaag 420
 agttgggttt catga 435

<210> 1000
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-F10

<400> 1000

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aagttgcagg ctttatcaag aaatgtcgac ttgtacctcg agtgaagtgt ttcagtcctg 120
caaccatcta tccaatgtgg ttttaaagtt ggatgctgag agttttttgt tccctgtgca 180
tagtaattca ggaattgggt ggtggagaac aagtttccgt ttatccgaag aaatatatac 240
aacttgcgac ggtggcgatt ttcacatgcc acttgcactt tgtctcagtg gaaatgctca 300
ctgttttgct tggatcaatc agttgcagat tgctcgttat gtggcaaatac ttggtccaca 360
aaatgtatct tatattccat gtgggttgct gtatagaaac gaagaaaatg tccctgac 417

<210> 1001

<211> 446

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-F11

<400> 1001

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ttgggtgctt atatgggaga tgccacagtg gcaactctgt tcagtatcaa aatgttgttc 120
tatcttacta tcatgggttt ctccataact atcttggttc tcatgggaaa gaactcggat 180
ggtatttgga tacatagtgt gccacctgca gatcaatatt gtgcatacaa gtcttcattg 240
gaggtgaacc accatggaat tgcttcctat tgcaagtata tcgttgccgt agctgctatt 300
gggttggtta tctcggtttt ccagttttgc tacggtctgt tgggtatctt tttcaagtgg 360
caacaaaagt tgtggtatat tgaagatgct ttcaatctat ttttctgggc ttggtggttg 420
gttggtgcta tcgttgctan cgctgc 446

<210> 1002

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-F12

<400> 1002

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gatgtaaccc attgtggaat acaggggtggt tattgtcgca ttgcaaaga gcaaaatata 120
cacagtccca acttgtcttt tcataaggaa tctaaaaatt ctagtggctt ggaggctcgt 180
gtgagaagca aatcatttcc agaatactct gtggaacata acaacactat tcaagaagag 240
tatatgagcc gtatgcggtc gtgttctcaa gttcttgaag acgagatata cggaacaaaa 300
tcagacaact ggatgcatgt ttctgatgat aaaagtccaa actcgtttgt agcaagaggt 360
aacaatgaca taacatatgt aggtgagaga caagatttt 399

<210> 1003

<211> 344

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-F2

<400> 1003

aaaaaacggt ggagaaagca acatgggaaa tttcttttcc aaactatttc agagactggt 60
tggaacaag gaagttagag ttttaaaggt tggactagat aatgctggaa aaactacgat 120
attatgtag aagaaactcg gaatacagtc ttcttttttt caaccagttg cactgtacac 180
cgaatgaaag aagatagcgc gattaagact gtgccaaaca ttggttttta taaggaacaa 240
attgaagtca acaacttgaa gaatcaagtt atggaccttg gaagacagtc atccaatcga 300
ccatattggc gttcttagta acagaaacaa gaaacgttga attt 344

<210> 1004

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-F3

<400> 1004

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gattcatgtt atgatatcca aagaaagact gtataaactt ccaaccatgc ttttgtataa 120
taagaatgta ccaaggcaag cttatgaggg caccagatag tattccaggt atccaaggaa 180

cttctgataa gactacttgc ttcaagtttc cagtagccca taagaatatg gacaggatgc 240
agacgggtaa gaacacgccc aaaggteccct ttgttaaaac agccaaagca caaaatacaa 300
agaacataaa ataataaaac ttgccgaggt gcgtatgggt gtcaaaaaaa aaaaaaaaaa 360
aaaaaaaaaa acaaaa 375

<210> 1005
<211> 298
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-019-Q1-E1-F4
<400> 1005

agcggacgcg tgggatcgac tcgaaaatgg cctataaata gcgtgatcat ttccccctttt 60
tgtttgttta tcgtttgtca aagtttggtt gttttcttgg tagcagttgt acattcaaca 120
tcacaaatg ccaaaggag gaaagaaaga ttcttcanag aaagaaacca caagtaaacc 180
tgcagcagca gatgctacaa agacgacaga aaagtctggt ccggaagcca agttgaaagg 240
aactggtgca aaaaaacaat aaaaagttga ctatgcatgt gcaatcctgt taagtttt 298

<210> 1006
<211> 422
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-019-Q1-E1-F5
<400> 1006

gcagagaggg actatgagcg agaaggtgga tagtcgagag ggaaaaagcc cagaagccaa 60
gataaggtat caaagtaaag aaagaaggaa aaggagaaga agagagggtta ggcttagaag 120
cagcaaacca gagaggaaag cgtaaagca tgaaagaaaa gaaatccgaa aaagaagaga 180
aaaaggttaag aaagaggacc gaatcagggt aagaggtaga ggagcaagaa gagaagagag 240
aatgctgggt ggagtagcga aacaagagaa gggaagtaa aggtaagaaa gaggaaagggt 300
ttacgagaga aggaagtaga aagaagagag tgtaaggcgg cgtcataata gaaatccgaa 360
aggagtagaa gaatagagag acaatanaga ttagaagaga aaagccgtag acctccaatc 420

<210> 1007
 <211> 355
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-F6

 <400> 1007

aaagattctt caaagaaaga agccacaagt aaacctgcag cagcagatgc tacaaagacg 60
 acagaaaagt ctggtccgga agccaagttg aagggaactg gtgcaaagaa acaataaaaa 120
 gttgactatg catgtgcagt cctgttatgt tttgtgagtt ctgtttgata gtttccagct 180
 attcttttgg tagtgaataa agagaaaatt ttttatattt aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa ggaagaagaa caaaaagata aaaaaattaa aataaacatg 300
 aaagaaaaat aaaaaaata tcaaaaaaaa aaaaaggggg gccctccaaa ggggt 355

<210> 1008
 <211> 323
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-F7

 <400> 1008

gttggtggtt tcttgtggcg tgtgtgggtg acgttggttac cgacgactgt gtgagagact 60
 acttgtaactt gcttcattct actagttgaa atatgacgag aggcaaccaa cgtgaggttag 120
 atagacaacg agcacaaaag agggcagaga agcacaagaa aaatgttcag aaagaaaagg 180
 agaataattgt tttgaaaaag gaaagggacg ccgaaataat gcgccaaaaa caagcagcag 240
 ccatggcaaa acagcaacaa ggagaaaaag tttaaataca agtggttggtg ctgttaataa 300
 aacacttaca acttactgct tct 323

<210> 1009
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-G1

<400> 1009

cccacgcgtc cggttgaatt tcaatgacgc tcattaaaag tgtggatgct cgagagattc 60
tagactcgag aggaaatccg acagttgaag ttcaagtcac tactgaacta ggtgttactc 120
gtgcagctgt tccttctggt gcttcaacag gagttcacga agctcacgag ttgagagata 180
acgacaagtc gaggtttcta ggaaagggag ttacaaaagc agtacaaaat gtgaagaccg 240
aacttgcaaa agctgtgatt ggtatggatt gtcgggacca ggcagcgatt gatcgcaaga 300
tgatctcttt ggatggaact ccaaataaaa gtagactggg ggctaattgct atacttgag 360
tttccatggc tgtntgtcgt gccggcgcac ttgccagagg agtttccttg tatcaacata 420
tcaa 424

<210> 1010

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G10

<400> 1010

cgaaaagctc agcttgaaga acaaagaact tgcgtggggg tggacgttat ttatgaactt 60
ggactctatt gacacaggaa ttaatgctcc ttttgacccg tttgcagacg cctcacgtgg 120
agaggacgca gcagtaacca aaaatatagt gcatattcgc ttgcaacaaa gaaacggccg 180
caagtgcttg acgacgattc aagggttga cacaaaattg gatttgaata aaattacaaa 240
ggccttcaga aaggagtttt gttgcaacgg ttgtgtcgta gacgacgcag aactgggaag 300
agtcaccaa ctgcaaggag accagaggga taaagtcaaa aagtttctag ttcaggagaa 360
attagctgaa aaagacctga taaaggtgca cggtatatga gtgtcgttgc cgtgtaaaga 420
caciaagcag tcgtcagtg 440

<210> 1011

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G11

<400> 1011

cccacgcgtc cgagaagaga aaaaggtaag aaagaggacc gaatcagggt aagaggtaga 60
ggagcaagaa gagaagagag aatgctgggt ggagtagcga aacaagagaa gggaagtaaa 120
aggtaaagaaa gaggaaggt ttacgagaga aggaagtaga aagaagagag tgtaaggcgg 180
cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 240
aaagccgtac tgaagaccga cacaggtact cgaggagaaa ggagacccaa attaagggtga 300
gagaatggac gataaggaac taggcaaaag gatatgggtat ctgcggtaga acatatgaaa 360
gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatg 415

<210> 1012
<211> 424
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-019-Q1-E1-G3
<400> 1012

cccacgcgtc cgatttgaaa ggaggggtcg acgagctcag cttgaagaac aaaaaactgc 60
gtgggggttg acgttattha tgaacttgga ctctattgac acaggaatta atgctccttt 120
tgaccggttt gcagacgcct cacgtggaga ggacgcagca gtaacaaaaa atatagtgca 180
tattcgcttg caacaaagaa acggccgcaa gtgcttgacg acgattcaag ggcttgacac 240
aaaattggat ttgaataaaa ttacaaaggc cttcaaaaag gagttttgtt gcaacggttg 300
tgtcgtagac gacgcagaac tgggaagagt catccaactg caaggagacc agagggataa 360
agtcaaaaag tttctagttc aggagaaatt agctgaaaaa gacctgataa aggtgcacgg 420
tata 424

<210> 1013
<211> 402
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-019-Q1-E1-G5
<400> 1013

gaaggtggtt gtgttccacc gctcaagcaa cctcgcggtt ctcagtttcg accacaagac 60
gttggtcttc ctaaagactt tcttttaact tcattttctc gtttaaaggg ctgaggatgt 120

aagggttcctc aggcagaatt agaaggtctc ttgggtcggt ttttgacgca accacacagt 180
 tgtagcccgga gtcaaggagt tgggttcggat tgctctctcc agccaagcca agtacctgat 240
 gtgtatttag cctctacaac agactttttc tttccgctcg tggaagaccc ttatactatg 300
 ggcaagattg gagcagcgaa cgtattgtca gatttgtatg cagcaggaat agtcgattgt 360
 accaatgtct tgatgatatt agctgcaagt tcagatatgc ct 402

<210> 1014
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-G9

<400> 1014
 cgacgagctc agcttgaaga acaaagaact tgctgtgggt tggacgttat ttatgaactt 60
 ggactctatt gacacaggaa ttaatgtctc ttttgacccg tttgcagacg cctcacgtgg 120
 agaggacgca gcagtaacca aaaatatagt gcatattcgc ttgcaacaaa gaaacggccg 180
 caagtgcttg acgacgattc aagggttga cacaaaattg gatttgaata aaattacaaa 240
 ggccttcaaa aaggagtttt gttgcaacgg ttgtgtcgta gacgacgcag aactgggaag 300
 agtcatccaa ctgcaaggag accagaggga taaagtcaaa aagtttctag ttcaggagaa 360
 attagctgaa aaagacctga taaaggtgca cggtatatga gtgtcgttgc cgtgtaaaga 420
 cacanagcag tcgtcagtg 439

<210> 1015
 <211> 295
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-H1

<400> 1015
 agacaaaagt gaaacaactt gtcagcagtg gggaaaattg ggcaatgtac aggggaagtat 60
 gaccagtaa tgaggagtgg agtaaacaga aaaggaagta aaaggaggga atgaaggga 120
 gttatggcaa aaacacgtgc cagcagcagc ggtaaaacgt gtgtagcaag cgtagagcag 180

aagaactggg tgtaaaggtc gagtagtana gtaagtgtaa aagggaaagg aaaggagaga 240
aagaggaaag ggatgaaatg cagagatctc tagagaaagg caagaaagaa aagaa 295

<210> 1016
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-H10

<400> 1016

cccacgcgtc cgccacgcg tccgcggacg cgtgggcgga cgcgtgggtt ggcaatgagt 60
gagttggtgc gacctggtcg tgtctttgat atcggctttg gtgacttatt ttcattggacg 120
aatgaccctt tcttccgtga tgcattggaac atgatacctc gagtaggtgg agctgattct 180
cagttatggt cgccgataat cgacctcatt gaagaagaag acgcgtttct ggtgaaagct 240
gacgtacctg tagtaccgac agaaaacatt aaagttgact tgaaagggga tatcttgagt 300
gtgtctggag aaaatgctga cgaaaaaag tcggatgaag atagagaagg aacggtattc 360
cataggatgg agagaagcta ctgtaaattt gaacgaagta tatgactacc aaagcagatt 420
gacaagcagg gaatc 435

<210> 1017
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-H11

<400> 1017

gaaacacaga tggactttgc ttgtcgagac ttggataatc tagaagcaat gaacatgcag 60
gtattgcgag agcgtgtgaa gtctcatggg acaacagaat aactcaaata ataacgtttc 120
gactattgga gacttgggca tgaaagatat ttggaagctt tttcaataga gaaaacgaat 180
ggcagtgcta tgccgtgtag attatattcg tgaaagaaca ggagaatgat tttatctaca 240
aagagatgcc ttgtgtgatt ggtactatct tcgctctttt ccgtctcaaa gattgtcctt 300
gtcatcatct gcaccgtatt tcaagtatga tttaaaatta tattgaactc gaagttatgt 360
atttcctgta gccataatca tttccctaag acaagaatgg atgaagaaag gaatg 415

<210> 1018
 <211> 394
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-H12

 <400> 1018

ggaaaaaaga atgttggtat taacaatagg agattttcat attcctagtc gagtggctgc 60
 agtgcctctc aagtttcgag aacttctcgt tccaggaaaa atacaacgag tattatgtac 120
 tggaaacttg tgtaacaaag agacagaaga gttcctcaaa gttatttgtc ctcaagtaca 180
 gattacaaaa ggtgatatgg acaacgttca gtcagaatat ccggaacgtt gtgtaaccaa 240
 cgtgggacaa ctttcttttg gtctttgccg cggacatcag ctaattccct ggaacgatac 300
 aaactcgctg gcggcacttc ggcgagatat ggggtgtagat gttttagtagg ttggtcattc 360
 gcattcgttg aaaatgacag agacgataga tgga 394

<210> 1019
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-019-Q1-E1-H3

 <400> 1019

agggcgggac atgatcaagt ggtagcgtac aaacgttcag aagaagaaaa atggagccaa 60
 gcaggtgaaa aaagatggca gttattcaaa agactggaaa aagagaatgc tactgcccgc 120
 tttttcttac aaaacaaagc tatttttcca ggtgctagag ttttggaact ggcttgtggt 180
 tccggagaaa ccactttgca agtagctgcg aaagtaagag gctattctgt accttcagga 240
 gagaccacgg gggaagtggg ggataaattg ttggatatat tacgtccatc ttatcaccag 300
 gaagggaaac tggatggtgc cagcaatagt ggttcggtag taggtgtaga tatcgccaaa 360
 ggaatgctga atgtgttcag angcangttg gaaaatactg ttttgaaaga tcacgtgcaa 420
 cttgt 425

<210> 1020

<211> 367
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-H4

 <400> 1020

 tcggggcaaaa caacaacttc agggaaacaa cttggaatcg ccacctacaa atacagaaat 60
 aggaatggaa gatacttgga ataacacgtc tcgttatatg tctattttat actatagctg 120
 gataagatgg cgtcatttat tgcattcctg tcgacattgg gctactcctc cctcgattgc 180
 catcgtatcg gcattattac ttggaacgat attcaagcca ctagctctat tgttgatagg 240
 ttccaatgct cctttgagag tagtggttgc tgcccaagaa actttgggtg ctgctgctat 300
 tgcattgatg tccttggtgg ttggtgccaa tttgtacaat tcttataaac gtggattccg 360
 taccaat 367

<210> 1021
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-H8

 <400> 1021

 gtttgttgtt ggtctggttg ctcaaggtgt gaaatggcag tagttgaaga taacagagtc 60
 tttgttggtg gtcttccttg gtcagttagt gaagaagacc ttcgtgaaac tttttccaaa 120
 tatggagaag ttgttgatgc aagggttgtt gttgaacgtg aaactgggtc ttcccggtgt 180
 tttggtttcg tctctatgc agaaggttcc tccgtagacg aatgcattgc cgcactggat 240
 ggcaaggata tgcaaggacg cactattcgt gtgaacaagg caatgtctcg tgaacaacgc 300
 gagagtggag gagactttcg tcgcggtggt cgtggacgat acggagggtt tcgttccggt 360
 ccttatgaga gacgtgaacg tgactctgat cgtagaagag atcatgacag gagagataac 420
 gggca 425

<210> 1022
 <211> 447
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-H9

<400> 1022

gggagggagg atgatggttt ggttgcggtt atgggtgggg ttgacagga tggcaggttt 60
cgctgcggcg ataggtgcct ggtggaaccc atcctcgccc atcgatacca tctaccgaaa 120
cattgcacca tcgcatttgc tcgcatctcc aatggatgaa gcgctcgctgt cgttggttaag 180
ccgcttatat gccacctggt tatttctttc gaccgttggt cgatgtactt ttatgctatc 240
ttccgagttt tccttgccctc tagccgctgt caccttggtc acctatgtcg tcgctgggtt 300
gcactttgcg gtggaatat ttatttacca cagggtgccg ttgaaacctg gtggtcaagc 360
acctttgttg gttgcctcgg tgcgatagg ttggatgctg tggatattga tggcgatgcg 420
gagtacaagg aaagcagaat ataggaa 447

<210> 1023

<211> 391

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-A1

<400> 1023

agtcgtgggt gacctgtttt gctgtgttcc aagggtttcc tttgcagtgt aaaaataaaa 60
ataataaatg ggacatgact ttgcacaaa acgataatcg ctgcttaata aaagaaaaat 120
ggaaagatat tcaatataga cagggaagt ggcaagactt ttccgttatc ttttctgctt 180
tatggagaga aaaaatgaat atcacgggag ctttttagtcc ccagtatttt gttattgcat 240
atctacaaa ggatgaactt gatgtgtgt tagggtttgg gcacgtgtgt gagaaattag 300
tagtaaggac gtggaagtta ttattcgttt gtagatcaaa cctatcaatg agagagcaag 360
aaagttggct tccttatcgt tatatcctga g 391

<210> 1024

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-A10

<400> 1024

aggacgcgtg ggcggacgcg tgggcaagag gagaggacat tgaattgttc aggtcataag 60
aaaggaaatg gtgatggaat aacttctgtt tcatttagtc ctcgttctcc ttatcgtatt 120
gcaactgggtt cggttgaaaa gacagtgaga gtattcgatg tagagaccgg tgaacttttg 180
cacaattttc gtcaacatgc agattctgta tattctgttg ctttttcgag cgatggaaga 240
tatctgttat caggttcaact tgataagaat gttatattat gggatcttgc agtccttct 300
ccaaataact atacaatttt caaaggccat actgactttg ttttgtctgt cgcatttagc 360
ttaaacggtc gtcttctctt gagtggcagc aaagaccgta ctgtaactt 409

<210> 1025
<211> 390
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-A11
<400> 1025

actcccggtt cgtccgagat gaaagaagat gcatttcctc gagtttatga cgacgcgaga 60
tggtttgggt tgaaaattgt tgtattggat caagcgagac ctagcaaattg gtcttttggg 120
gaaaattccg caccacaatt gcaccgattg gagcgactat tggaggaatt ggatgcttct 180
cgttgatcg tggttggaaca ttatcccgta tgcaatgccg atggaagctt atccgatacg 240
tttggtcgca gtttaaaaga tgtgggcgag ttgtaccaag tattgtgtag acaacctcct 300
ttggcatatt tatgtggaca tgatcaccaa cattatgtgc aatatatgca agttgggtgt 360
ggaaacggtc gagtgccatt gatatgttgt 390

<210> 1026
<211> 425
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-020-Q1-E1-A12
<400> 1026

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tcttgaaagc gttgcgtgtc tcatgtttct tccctgcaag gcatcgttat tcataggaac 120
agaggataca atctcctctt tggatagcat acaccggttc acggatttga gttgttcctt 180

cgactccgc aactcagtc ccaaagattc taattctttt actagacaac gacgctcttc 240
aagcaactca agtttctttt tctctgcttt acataagcta ctggttggtt cttcttcttt 300
ggattttag aaaccaacga gtgcttcag ctctcgctt aggccttgta tcaactgcctt 360
cttcttcttt cttgatcgtg acgcagagtc ncggtttctc agtttcttt tataaagcat 420
gatat 425

<210> 1027
<211> 400
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-A2
<400> 1027

ataatgaaac ctcttcaatt ctacttgctt caaaaggagc tcgaagggtt tccaacgtac 60
ttgctggtaa aacctttggt tctgttctc ttgcgaacaa aggctccgtg aagtctttta 120
gcacagggtc gctctctcac gttgacaggg aaggcaacac tgcttcaact acttttgact 180
ttaccgatga gaattacgag aagattgaga atattttgaa gaaataccct agaaattaca 240
agtcgtcagc agtgattgca ttgctcgatc tagcacagcg acagtgtggt ggttggttc 300
ccttggcagc gatgaatcaa gttgcaaaga ttttagagat gccccgata agagtctatg 360
agattgtaac attctattcc atgttctatc gtgaacctat 400

<210> 1028
<211> 392
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-A4
<400> 1028

cgaagattgg tgggaaaatg tcggaagaac aaaaagacaa tctaacaag accgcttccg 60
ttgtttctga acaagacaac caaagtgaaa aagaacaaga tacaacaaca actgttcagg 120
aagaacaaca aaagtacaac aataataaca acaatagtga gaactctaca gtccttggtg 180
aagataccaa gtcccaacta gtgagagcct ttgcggatgt taccaagggt tcgtcttcgc 240
aagctgaaga atatcttgaa aacgccaact gggagctaca aacagcagta cgacaatact 300

ttgataacaa cgagaatgcg actatcggag aaagtcctgt ccctactgcg gatagtattg 360
cagcacacat tacagaaata agaaagaaag ca 392

<210> 1029
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-A5

<400> 1029

gccacgcgtc cgggacgatg gaaggtgttc gacgtgcttt ctatgtagtt ggtcagatga 60
taagagaaac atgtcaatcg atggatcact tgggtatccg agttcaagga ggttatcatt 120
atcgtgaacc attgagtaga cataggcagt tgatgaacat cggattaaag aaaccagtat 180
ttgaagacaa tgtatttatc gtccecaatg cttcgggtgat tggcagtgtt caacttggag 240
ccaatactag tgtgggctat ggtgcactgt tgagagcgga tgccgtaccc atcgtggttt 300
ccagtggcag tcatatcgga gataatgtgg ttattcattg tactcgtaca ccggaagaac 360
gaggaaaccc aacgtttatc ggg 383

<210> 1030
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-A6

<400> 1030

cccacgcgtc cgggcaatcc aaaatggtta gtgcctcata tgggtgtttac tggaaatcga 60
ccttcctctt gtctcttgat gcctgtctta gacgcgtatg ttacgggaca acttttgggg 120
ctttatgaac atcgcacagc cgtgcaagga ttcctttggg agattaactc atttgatcaa 180
tttgagtag aattgggaaa agtcctggca aataaagttc gcaagcagtt gaacgaaagc 240
agatatttta ataaagatat ctcagggttc aatccctcta ctacaaggct gctcaatcga 300
tacttgggaag gttctgtagg atgtgctttc gagcatgttt atcattatga gtagtttggt 360
tcttgttttg gtggagttga ttttttgata aaaatcatcg agttttataa agtacgatag 420
agcgatgtgt gtcctt 436

<210> 1031
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-A7

 <400> 1031

atctgatgtt gcgaccttat ctgcaaagca aaggtcagaa tgtcgttgta aataatgata 60
 gagcatcagt ttcaccagat gaaactgggtg acgacaagta tgtcgagagt tattcggggag 120
 agttacaacc aacttttcgg gaattggaag atggaagtaa gcttttgggg tgttcgcatt 180
 atttacgagg cgcgaaaatt cgaacagttt gttgttccaa atttataact tgtcgattgt 240
 gtcgatgaga agtggaggat cacaagggtg gagacaaccg ctatgcaact cgtgaaatgc 300
 tctgtatgca ttgtggccat attcagccta tatctcagtg gtgttgtaag tgctcaaaaa 360
 gaatggcacg ttacttttgt cccatttgta aattatttga tgatgattca tctcgaaaca 420
 tatatcactg tca 433

<210> 1032
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-B1

 <400> 1032

acccacgct cgcgccacgc gtccgtgcat ctcgttacaa cttggaacaa tggcaccttc 60
 caagattatg acccaaccta tagtaagtat tatattctat ggtctcataa aagtatcgac 120
 gaatgtttgt cggcagaatt tgatatttcg tttcttgcaa aaccgaacca aggttattat 180
 ttggttatac gaggaaacca gttgtaggat tgaaggaaaa ataagtggct tcgatgagta 240
 tatgaacttg gtcttggtatg aggcagtgga gtggaatata aagaagaaca cgagaaccaa 300
 tctgggtaga atactttctca aaggggacac tattactttg attcaaccg cttaggagga 360
 aagcgggtgtg tgtcgtccgt tgacaccaa cagagttttt gtgtcaatag acaaagagct 420
 gtaaagatta gagactacaa c 441

<210> 1033
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-B11

 <400> 1033

 ggagaggaaa aggactgtca tatttttttac gcagctagga gcgttatcag tcctcctcct 60
 ccacctccag gaactccagt ttcttatggt accaaggaga aagttatgga agcccttaga 120
 aaggcagaat tttcagatgt aaaggcggtg gagtttgagg ttgttcatga aaccaagat 180
 gccgaagaat acatcaccct tatgtctggt gtcaataaat ggatggaaaa aagtttgga 240
 gagaaagggt ccgaactttg gcaaaaatta gtaaattatt gtaacgatcg ttatcgact 300
 ccaaattgga atttgcgatt tcctaattgt tgtgtcggag tgacggcaat tgcttaataa 360
 aagaagagtg tccgt 375

<210> 1034
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-B2

 <400> 1034

 gtcgccgtct tggaccgcac attgttttgg tggtcgcttt tgtcgttcaa gaaaggacgt 60
 tgtagtagcg atatttatcg atatggccaa aagtaaaaat cataccaacc acaaccaatc 120
 ctataaagct cataaaaacg gtatcaagcc acctcgacag caccggtttc aaggagaaa 180
 gggggtggat agcaagtttc tacgaaatca gaaatatgca aggacgggaa cgattcgagc 240
 gttgagaaag cagcgcaagg aacaagagaa agctagaaga gcgacaaaac agtagatgtt 300
 ggaaatggat attttcaata caagctagta aaaaagatat ttcgagtaga tggttt 356

<210> 1035
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-B3

 <400> 1035

cgaccttgct ctactcctta aatttgaaat attgctatta caagttctca aatgggaact 60
 tgccgttcct catgcctttg acatcttctg tgcttgata gattacttgc ggtgtagtaa 120
 tgatgtctcc ttggttacat atgcttacag tttgttgcaa aaatatgcca cagagtattc 180
 catgctaaga ctttctcctt ccactttggc aattcattcc attctggtgg ctcttcaccg 240
 aaatgcgtct gcttctcggt ttgataaaag tctttgcgag gatattgaga aaatttctac 300
 ccttctccag gttactccat cgcacagaa tgagtttcag aatctactaa aggagtgaa 360
 gagaagaatc ttctg 375

<210> 1036
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-B4
 <400> 1036

aagaagatgg tctacgagat gcgacgagcg gttgcttctc acgcgttacg tgcataatgctc 60
 cctggcaagt ttactcggtc cgtactaagt atcttgtgca ttagaagtgc aggtgttatt 120
 ggtgctgtgg gagttgtttg ttttatatgc tgtagtatca atccgagaaa cgttatcagc 180
 aatgtatatc acattatatt tgcagtgttg ataatccttt ccgagttggg tttcactttt 240
 ctgttgaagc ggtttgcgtt tttagatacg ttttttggac ttggaatatt ttatatatttc 300
 gtgagtttat tggcagtgga tactcactgg tttcagatat tggctggagt agttgt 356

<210> 1037
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-B6
 <400> 1037

atttcatcat caaccagaaa cgactgttat atttgcaaaa aacagagaaa agcttattca 60
 ccttgatttc aacgaacttc tttcagagct gctaactctt ttgtggtttg tcaaaaggag 120
 aacgagtcgc ctgaacgaga cgcaagtga acaactgaat taaaggattc ctctgcgcct 180
 cagtctatat cgatagatga agcaaaccga atatttgaaa aggaagctta ttcaggtcat 240

gaagcagagc cagtacctga aaaggaacct tatccgggtt attatcggga catggaacaa 300
atgggtttta aacctaaacc aaagaatgac ggactcaaag ttgggtgggtgt caagtccttg 360
tacagagcag atggcactcc atatgctcct tggttaattg 400

<210> 1038
<211> 407
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-B7
<400> 1038

cccacgcgtc cggaatttcg tacagatgag ctaaaatgga tggaatcgac tcgaaaatgg 60
cctataaata gcgtgatcat ttccccctttt tgtttggtta tcgtttgtca aagtttggtt 120
gttttcttgg tagcagttgt acattcaaca tcatcaaag ccaaaggag gaaagaaaga 180
ttcttcaaag aaagaagcca caagtaaacc tgcagcagca gatgctacaa agacgacaga 240
aaagtctggt ccggaagcca agttgaagg aactgggtgca aagaaacaat aaaaagttga 300
ctatgcatgt tctgttatg ttttgtgagt tctgtctgat agtttccagc tattcttttg 360
gtagtgaata aagagaaaat tttttatatt taggtaagag gaaaaca 407

<210> 1039
<211> 441
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-B8
<400> 1039

atcacttccg acctttgtaa agtttctatg ccgttgcttt tatctttgca aagttttaaa 60
ttaaagcat gattctgaaa tagtgactgt atttctcttg caggagtttc gtcttgaggg 120
agctagtaat agggagcttg ttctctgcag ctgcctttct tatgtctatc atagtattct 180
atatatatgg cttaagtttc aaacgagagt ccttgaaata agaaccaagt tggcaacagt 240
tttgcgttcc ttggtattga acaagcacia gctacatgaa actgacaaga aaacctttct 300
cgaggatatt taaatagtat atttgttatt ttatctcctg agttctttta ataactgcca 360
agagtgttgt caactagatt ttacttttag tggttattta ggagaaaaat tgttaccttg 420

tcctacagtg aaattacttt t

441

<210> 1040
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-B9

<400> 1040

gaaaaacgtg tcatatggcg agcttctaag agaccgcctc cagaagattc tgctggcttc 60
aattttactg cgtttgcaat tattttgaat gagttgacgc ctagtattga agagaagatt 120
ccaccgacgg actcgagaag gagaccggat caacgggctt tagaagagtc tcgctttgcc 180
gatgctgcga atgaaaagca acgtttggaa gaaaaacaaa gagctgctag gaaggtaaga 240
agaatatgag ctacaagatg tatgttttct gtgatggttg atgaggagga gtatagatga 300
gagaagagcg aggggaagaa tattctccat tatggtttga ctggaaatat gaccaagtca 360
ccgaaaagta cgattggaag tttaatggca aatattatat tcatcgcaa gaaaagaaat 420
gggacatatg 430

<210> 1041
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-C1

<400> 1041

cggacgcgtg ggcggacgcg tgggagtatt cataagcatt ttgggctttt tgttgctttt 60
atccttttct tccatgtttt actggatgcg aaaaaatgct cctcgaacgg acttatagat 120
gcttatcgat ggagctttcc gcggtgtaat gactttgaat aataaagttg ggttgcttcc 180
atttattacg atagacagtc aggggtgtttc gatatgttta tcaagttggt aatagcagtg 240
tttttcttga tcaaccattg tttttgaaag agtatgtgaa gagcctacta cctacgaaaa 300
atgaagcaag gatgtagaat acaatagata tttttaaaact gtccacaagg aataggcggt 360
gaacaatata aaaaaatttc ccttgccaag 390

<210> 1042
 <211> 103
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-C10

 <400> 1042

 attcgggtctc cttttcctcc acttgccaca atatagcaat agaacctgtc ttttctccca 60
 acagcgttta ttttatatcg agtaaaaaac cttgtttcac ttt 103

<210> 1043
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-C11

 <400> 1043

 cccacgcgtc cgcccacgcg tccgccacg cgctccgccca cgcgccgag agaggaatcg 60
 atcaagcagt caaggcagtt acagagaaac ttagaagtat gtccagaaag attaattcga 120
 aagaagaaat acaacaagtt gctacgatat ctgccaacgg agatgaagaa ataggcagtt 180
 taattgcaa agctatggaa gctgttggga gagaaggaac gattacagtt tctgatggaa 240
 agactgtaga gaatgaattg gaagtagtgg aaggactcaa gtttgatcgt ggctatattt 300
 caccttattt tgtgaccgat gcaaagacac agaaatgtga atttgagaat cctctcattt 360
 tatgtgtcga gaagaagata tcttcggtga atgca 395

<210> 1044
 <211> 339
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-C12

 <400> 1044

 aaaaaaaaaa aaaaaaaaaa aaaaaagaaa aaaaaaaaaa aaagaaaaaa acataagtac 60
 acataaataa aaagataaaa acactactaa aactaaaaag gggggtcgct ccacaggttg 120
 aactcttact tacctttgaa cggggaaaca tcagctcttc acaaagggtta cccaatttcc 180
 tttcattggc cgttttttta aaacgctctg actggaaaaa ccctgcggtt atccaactta 240

ttcccccttgc cgcaattccc cctttttcca gcaggcgtaa tatcaaagag ccccaaacc 300
 ttgcgccttc ctaacatatt cccaacctta atgggaaaa 339

<210> 1045
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-C2
 <400> 1045

acggacgcgt gggcgagggt cttatcgtgg aatgaaaaga gattcagaac aaggaggata 60
 tgacttgag caagtagtag aacatgttgt tcagtttgaa gagcgtttg gacgtcgacc 120
 acgtatctta gttgccaaaa tgggacaaga tggacacgat agaggtgcca aagttattgc 180
 ttcaggattt gcagatttgg gttttgatgt ggatattggc cttttgtttt cgactccggc 240
 agaagttgcc aaacaagcca ttgaagcaga tgttcattgc attggcgttt ctagtttagc 300
 agctgcacat ttgacactag ttcctgaact tatggaagaa ctacgaaagc agtctgcaac 360
 acatatcaaa gtcategttg gtggagtcac tccatataca gactatgac 409

<210> 1046
 <211> 354
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-C4
 <400> 1046

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 tggaacgaca gcttattcta tgatgggaag tacattaact tttgtgctta ttctgcctct 120
 tctgtttag aaggagggga ccatggagcg tgtaaatatg tcatggcggt ggcgtctata 180
 agtttgattc tagtcttttt cttgtggctt ttacatttg tagatgcgtt gtatcctatt 240
 cttaccaagt tttggtttat tgaattgggt atcaacgtgt ttcaaacaat gtggtggttg 300
 gttggagcaa ttgttgatc tgcannaagg cctacaagct ctgtactaga cgct 354

<210> 1047

<211> 415
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-C5

<400> 1047

gtttcttaga caaagaaacc cgtcatttta ttgggtgatt tcaacgttgc tcatgaagaa 60
 atagatgtgt atgctcccgga cggattgcgt tccaaagctg gctttgttgc tagtgaacgt 120
 gaacattttt cccagttttt gaaagaaacc aacacgatcg atacatttcg ttatttgtat 180
 cctcgacaaa cacaagcata tacattctgg gaatacaaga cgggaggtag aattcgtaac 240
 caggggttga ggatcgatta ttggtaggaa tgtagtcata tctttgttat atttttattt 300
 tcgttttcta gtttgatata ttgttctttg gtggagcgtc tgatggattc cttcatattg 360
 gacaaagtac aaggaagcga tcattgtcca gtangaattc gattgttgtg gagtg 415

<210> 1048
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-C6

<400> 1048

tttcctttgg gctcttatcg attgcctgcc ttctctcgac actcgttggt ttgtcctttg 60
 aaaacacgtt ttagacagat tcaaatggct gcagtaactt ttaagaaaca gaatactgat 120
 gtacctggta ttctatacgg agaaaatgct cccaacaact ttggagttat tgttgtccaa 180
 gagtgggtggg gtttgaacga agtgatcaaa aaacgagcac aagagctgag cgatggtttg 240
 caatgtaaag ctctttttgcc agattttttat cgaggaaaag tagccacca accagatgaa 300
 gctcatcata tgatgaccaa tttggactgg cccggcgcta tcgatgatat tgcagctgcc 360
 tgtcagtact tgaaggaatc caaacagtgc aagaaagtag gcattgtang atactgcatg 420
 ggtggcgcta ttg 433

<210> 1049
 <211> 409
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-C8

<400> 1049

gatgaattgt ggcggcactt ggtcgcatcc aaagatgtcc gctagtcgaa caccgagtgc 60

gctatctacg ggatttattt atagtttttc aaaagttact cgtactttga gtgtctttca 120

caatagtaaa agctgttttt cataccctcg tcattcggaa ggactatgtg tcaagcctcg 180

attattaaag gtccattttt tggccaagcg ttgtttttcc agaaaacgaa agagccagac 240

tgacacgaaa gcagtgttaa atgaaagtac gacacttcaa agcaaagaga gcttacaaga 300

atatggtgca agtcaaatat ctgtattgca aggcttcgaa ccagtggaga agcgacctgg 360

catgtatatt ggctccacgg gtatacaagg attgcaccaa cttgttttt 409

<210> 1050

<211> 56

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-C9

<400> 1050

cccacgcgtc cgaggagtaca cccaagtaaa ataaaaccgg cttcttttgg tgggtgc 56

<210> 1051

<211> 343

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-D1

<400> 1051

cagggaaagta tgaccagta atgaggagtg gagtaaacag aaaaggaagt aaaaggaggg 60

aatgaaggga agttatggca aaaacacgtg ccagcagcag cggtaaaacg tgtgtagcaa 120

gcgtagagca gaagaactgg gtgtaaaggt cgagtagtag agtaagtgtg aaagggaag 180

gaaaggagag aaagaggaaa gggatgaaat gcagagatct ctagagaaag gcaagaaaga 240

aaagaaagga agacacagta aatgaggcga gaaagcatag gaagtgaaac ggattaggaa 300

cccgtgtagt ctatgcagta aaagaaagaa tgagtaagaa aaa 343

<210> 1052
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-D10

 <400> 1052

 attgaatctg ctatcaacgt gtttttctgg gcttggtggt tggttggtgc tatcgttgct 60
 actgcggaac gaccttctac gggaatgctg aacttgcaca acaacaggac ggaagtaaac 120
 gcagtggaag ccttgctttg ggccaacatg tgcttgact tcttcaatat cttcttgccc 180
 tttttgatat actgggttgg tgaaaccggg ggttggttgc ctaccgttgc agactatcgc 240
 gtgttgactt ctgtggagaa ggatcaaact ttgtccaaag gagcggagat gcatcaagaa 300
 gagtctgcat aaaggactag ttttgtatag ttgccatcat ggacgggttg tgtggaaagt 360
 tgtgattgtg tagagagtgt gtttgtgagt tgtgtgtggt aatgttgttt tac 413

<210> 1053
 <211> 339
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-D11

 <400> 1053

 aacgctttgg agtgtcgttg tggtgtgtt ggtgaggtgg gaagcaagaa gagatgagta 60
 gaggaagtag tgccggttat gatcgacata ttactatatt ctctccagag ggacgactat 120
 atcaagtaga atatgccttt aaggctgtta agtcagtagg aattaccacc gttgctgtaa 180
 aaggggctgg atgcagtttg tggagtaact caaaagaaag ttccagatta gtcattgac 240
 cctaaatcaa tcaacaatgt tttccgaata accgattacc acgggtgtat tttcactgga 300
 cttgcaacgg acgcaagggc acaactacaa cgaacacca 339

<210> 1054
 <211> 255
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-D2

<400> 1054

acacagacgt ccgtgcaaca aggccgtaac tacctatact caaacctgct gtgcttatgc 60
gcatgaaagt tcctatgcac tcagtaacga gcaatatgtt caggaaactg tgtctgctca 120
atatacttca tactaccggg aagcatccgc caactactat tatcgatcag ctgcgcctca 180
gaaatggtat aaagaagaat ggcaatcata gtgctggttt ccaatacagg cctatgacac 240
ttatcaaggt tctcc 255

<210> 1055

<211> 263

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-D3

<400> 1055

agatatctgg tactcctcga tagctatatt cgtaccgtat gcacgatatc ataacgttta 60
tgaagaacaa tgaataacac tagatgacta ttagcgagaa ggtgtatatt ctatatggaa 120
aatgcccatt ggccaatatg atgtatcaaa tggtataaat aagtaaaatg ataataatat 180
agggtatgct tagaagcacc aatccataga ggaaaacggt taagcatgat cgataataac 240
tctcaaaaag aatatacaca cgt 263

<210> 1056

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-020-Q1-E1-D4

<400> 1056

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atgaagtggc aaagcgggtcc taggaatata agttttaata ggatacaaac gctactgctt 120
ttcttgttga ttatttgcaa cgtttttcca tatagttact ctatacaatt ttatatgaac 180
gctggaacga agcgttgtct ttcggaagaa attacctcaa acacaaaggt gtttggtgaa 240
tgtcttgtn tccgtgcgga aggtccatg tccgtagatc tggtgattcg aggacctcaa 300
ggggagacta tagtgcaaca gaagaacata gataagcagt catttagctt cacagcacca 360

cagcacgttc ttgct

375

<210> 1057
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-020-Q1-E1-D5

<400> 1057

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ttatggtgga tatgaagaca tgtacaactt taaccagttt caagtaggag ttgaaacccg 120
tgcaagaagt ctgagaagcc atgctgcttt ggaagaagaa agtgggaaaa gtgaaggcgt 180
cggtgctctt cgaaagcggc caggagagtg ggatccttgg gagagtatag aagtgcgctg 240
gattcaacct atcgatagaa acatggaagc attccggttc cttagtcctt gggagcggtta 300
tcctttacat cagcaaggaa tcagttttgt ttagcatcca cttatttgtc gtccgcatat 360
gaaagaagcc aattcaggag tgcgcatagg ttccggacgc aatatgagag caganactat 420
gtcagcccg c a 431

<210> 1058
<211> 437
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-D7

<400> 1058

gggaaacgca gcgattccat gttgaaagag ggtacactat attgtccgat ctcaagtttc 60
agggtgcttca agatggaaaa cccaggtga taacttcgga tcaagtattc ggaggaaaga 120
aagtagtatt gtttgggtta cctggtgcct ttactccaac ctgctctagg cagcaccttc 180
caggcttttg acagaagggt gatgaaatca aatcgaaagg agtagatata gtcgcttggt 240
tagctgtcaa tgacctttt gtattacatc agtgggcaga gtcacaggga gtggcaggaa 300
aaattctcat gttagcagat ggtggtgcgc aatctgtcaa gaaacttgga ctggatatcg 360
atactggtga ctttgggtgt attcgttgtc gtcgattctc aagcttgatt gacaattatg 420

tcgtgaaaaa gcttcat

437

<210> 1059
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-E1

<400> 1059

accacgcgtc cgaaggcttc aggtgtcgac caaggcatca atactgcaac cgaatttggt 60
ggatcaattta aggtaactgg atactgtacc ggattgtttt tggatcccaa aggaagaggt 120
ggaacttcgg gttatgatat ggcagtagct cttccagcaa aggaagccga tgggtgcagaa 180
ggatcaagaag acttgttgag agaaaataac aaaatatttg atgtgaccga tggttccata 240
gagatggctg tcaacaagtt ggacccaagt actggagaaa ttgccggtgt tttcgtttct 300
gaacaactct cagatactga tatgggagca aaagatccga aaaaagtgtt attgaaagga 360
atcttttatg gtcgcgtggt ggaagatgat gctgcatcgg agtaataaga atggacaatt 420
ttg 423

<210> 1060
<211> 407
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-E10

<400> 1060

cccacgcgtc cggatttcca gatgatattt atgatggcta tactagtaac gttccaggaa 60
atccgtggat tctatgtact ttaggaatgg cgcaatatta ttatgagttg gcagcagagt 120
ggttgaaaca tgaaaagatt gtcataaggaa agtggagcaa agactttttc agacatttga 180
gggttatgcc tctccttct cctcctcaat cttctatata gacgaccatt actggaaaag 240
cgatttgtag ttatgtttct gcgctattag aagaaggaga tcgcgtattg aatgctattc 300
gaaagcatat agttcctagt ggtatgttta cagaggagat tgatcgatat actggtttcg 360
agcaaggagc tatcaattta acttgaggtt atgatgcctt tggttact 407

<210> 1061

<211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-E11

 <400> 1061

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 aagaactagc caaccttcca atattcatag agcacagaca accacagata ggacaaatac 120
 aactcatata accaacagaa ataggcaact tgcaacagct cgtcgcacatg ctgttcaaga 180
 aaactatcct gagattcctt acaaaatggt atttatattt gctctcttct gtttctcggt 240
 gattggatta gtttcttatg gggttatggtt ttcaggagcg ccttgggtcca tagccgtcat 300
 acccctaata gcccgaagct tcgggtttac tctcctcttt accatgtttt atatttcttc 360
 caaatatccg cctcccgtaa gaaagacaac tactaggcaa agaat 405

<210> 1062
 <211> 297
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-E2

 <400> 1062

 aggatttata actgctgtga tttccaatgt ggactttgtg actcgcaaca tcacatgcaa 60
 gtttaccatg gtcgacttga agaacgagaa gacattgata gcgcataata cttatgcatt 120
 gattactatc atatcgttct ttatggaatt gcgctttgca ttagtcatgg aaggctttcc 180
 tcggttgga tctgcggttg ctggagtatc gaaagccatg ctatttgga gcatcatggt 240
 ttgctcccta ttttaccatc tttataacga ggtttcgtac ctttgtctgg ataatgt 297

<210> 1063
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-E3

 <400> 1063

 cggacgcgtg ggttcgtgat gaggttgctg acttgagaa ggctggttgt accatcgttc 60

aaatggatga acctgcgctt cgtgaaggtt tgccattgaa gaaggaacgt tggaatgaat 120
 atttagattg ggctgtgaaa gcttttcgtc ttagtacggt cggtgcagca cccaagacgc 180
 agattgtcac ccatttatgt tatagtgact ttcaagatat tctaaaagcc atcgatgaga 240
 tggatgccga cgtattaacc attgagaata gtcgtagtga tgatgccatg ttgcgtgccc 300
 ttgccaahta tggttattca cgtgatgtgg gacctggagt ctatgatgtt cattcaccgg 360
 ctgtaccgag catcgaattt ttgaaaaaga aaa 393

<210> 1064
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-E4
 <400> 1064

cacatttgtg ccatttcttc tctcgaacgc aactttcacg atggctgctt cctctaaagc 60
 gatatgtgtt ggtaaaaact atgaaaaaca tgcccgtgaa atgggtgata tggccacttc 120
 tctgtggagat cctatcatct ttctaaaacc tagttccagt tatttgcac aaggcagtcc 180
 catcttgta ccaaagggtg ctcaagtaca tcacgaagtg gaattgggag tgattattgg 240
 tgggtgcaagt gctgttagga acgtgagtgt gaaagatgct atgcagtatg tccaagggtta 300
 tttgtgttgc ttggatatga ctgcgaggaa ctggcaatct actgctgctt ccaaagggga 360
 gccttggaca ctggcaaaag gttgccatac ttttctccct atgagtgaag gaatacccaa 420
 agatcgatt c 431

<210> 1065
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-E5
 <400> 1065

cccacgcgtc cgacgagaca agtgatatgg aagatatatt acaaagagaa gaggttagaa 60
 aagcgttatg gaatgccgtt ttgccagcaa cgagacaggt ggacccggtg ttgtgggatt 120
 cagtagtaaa agttgtggag gaaagaataa tagaatattt aagaaactgt cctagacagc 180

aagctaatat agaagacttt gagacgaata ttgtatttga aaaggaaggt ccaccagcaa 240
 gtcttgacca agttataaaa tatttgctag agaggaagga gctgggtcca gtaggagttt 300
 ttcaacttaa gaatgttgcc atttgtgata attcgacaaa cgtagcatcg tttttagcca 360
 gtgcattcaa gtatcctttc gaactgctca agcagacctg ca 402

<210> 1066
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-E6
 <400> 1066

cggacgcgtg ggcttatgag cattcgctgt ctggaagacg tgatgggcga aagtcttacg 60
 agatacgagg ttttcgctgt gagttgggtt atttagaacg tgcagatggg tcatgtaagt 120
 tagaacaagg gaaaacgcag gtcgttgccg cagtatatgg tcatctcgaa gtaagaaagt 180
 gatacttcta atagtacgcg tataagactt tctcttgat taggccagag gaagaaccga 240
 acttccggac aggacattta tagaagtttc cattcgacct tgccaaggat atacatctga 300
 ttatttgagg cttcgagaac gtgaactgga agaagttttt attgctaccg ttgctactga 360
 gttacagccc cgaagctgtg tggcaatcat tcttcagatt gtagaaaacc atggaagcct 420
 aatgt 425

<210> 1067
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-E7
 <400> 1067

ggatagtctt ttgcatgcc ttgccatttt gaacctgta tggagcctga ccctctcaac 60
 cacgaccact tagccaaatg gcgaggttac tatgtccta atcgteccag tcaactacaag 120
 cgtattttag ttacaggagg agccggtttc atcggttccc atctgggtgga ccgccttatg 180
 gaagaaggga atgaagtaat tgtactagac agtcttttta ctggaaagaa gagcaacttt 240
 tccaagtggg tggataatcc aaagtttgag tttgttcgtc acgatgttac ttttcctat 300

caggcagaag tagaccagat ttatcacctg gcatgtccag cgtcaccagt tcattacaaa 360
tacaacgcta tcaaaacggg aaaaaccaac gtattgggga ctttgaaaat gtt 413

<210> 1068
<211> 406
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-E8
<400> 1068

cggacgcgtg ggcggacgcg tgggaggacg cgtgggtgcc tgggattatt gaagcgatat 60
gtggaggact tgccattggc ttttcgcgcg cggcaaatgc tgttttgctc ggaagagtaa 120
ctgggtattag tggcatcggt ggtgggtatcc ttgcgaaaca gtcaggtttt ggatggagac 180
tatcttttct tggaggactt gcaggagggtg gttgggtatt aaggaagttt ttgccgagta 240
cagttcctat cgtatctgga cttgtgtctc cctcagatt ggctcttgct ggtgctttgg 300
ttggctttgg cactcgatta ggaagtgggt gcactagtgg ccatggtgta tgtggactag 360
gacggatgtc aaagaagtct ctctgtaatg tgctagtgtt tatgac 406

<210> 1069
<211> 424
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-E9
<400> 1069

cggggtgttg taatggcagc gtcttgacc aaggacaaac aggaacctac gcaaagttgg 60
ttcgtgccc atgaaagtaa gcgttggtgt gagaaatctt tgctcgttgt gactcctttg 120
agcattgctt ctttgatttt gggattgatc ggcagcgggt ggtacaagta ttgtggaaaa 180
aacgaatatt tgctgttctc gctgctcatg gcagcaccat gtttcgtctt tccattgttt 240
ttctgttgcg acgaagacaa aaggagacct ttttcgcagc gcttttgggt caaggccaat 300
ttatggaatt ttattttcgg atatatcgga aattatcttt ggacgcacta tttctatcaa 360
ctactcggag cacactatac ttttgagtcc tatcactgga ataatgtacc gattccaatg 420
ttat 424

<210> 1070
 <211> 384
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-F1

 <400> 1070

 gtaacaacta tcagcaccac taaaagatgg ttcgtatgag tgtattagcc gatgctttga 60
 aatccatcgc caatgcagaa agaagaggaa agcgtcaagt tctcatccgc ccgagctcca 120
 aagtcatcat acgcttcttg caggttatgc aaaaacacgg atatattgga gagtttgaat 180
 atgtggacga tcatcgctcg ggcaaactcg tcgttcactt gataggcaga ttgaacaagt 240
 gcggtgtgat atcaccacga tatgacatga aagtgcacga agtagagcaa tggatcaata 300
 acttgcttcc aagtcgacaa ttcgggttcg tagttttgac gacatcgtat ggtattatgg 360
 accacgaaga ggcaagaaga aagc 384

<210> 1071
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-F11

 <400> 1071

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 tcgttatcat acaactacta ctgtccatag agtagcagca gaagaagaaa aggaatcggc 120
 cggataaaag cccaaacgtt tgcacagcc tcttgagtt tatccacaag gaaccaatct 180
 ggaagaagtg agagaaaagt ggcaaagtga cgctatggaa cttatctcga aagtacctcc 240
 gatagtagtc gatggctatg tcatagcgtg taatggaggc ggtggtccat taggacatcc 300
 aatagaatat attcggttgg aagcacctta tccttcaact tgcaaatatt gtggtttgcy 360
 atatatcanc aaagacactt ttgaaaagtg gaaaaaggaa aataacgaat 410

<210> 1072
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F12

<400> 1072

aggaaataca ggaaggagtt ggtttaggta tgaaagaatt gaagcgaact ctacagtctt 60
tagcttgcgg taagattcgg gtactgaaaa aggagccaat gagtcgagaa gtggaaaatg 120
aggacacctt ttatttcaac aaagactttc aagataagcg atatcggtc aaaattaatc 180
aaattcaagt gaaagaaaca ccggaagaaa atcagcagac gacagaacgt gttgtacaag 240
atcgtcagta tcagattgac gcagctattg ttcgcatcat gaaaacgaga aagtctctaa 300
cgcatagtca gttgatgtcg gaactttatg agcagctcaa gtttccctat caaccggcag 360
atttgaaaaa gagaatcgag agtctcattg atagagagta tttagaacga gacgcagaca 420
ctcctcagct gtatagatat 440

<210> 1073

<211> 144

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F2

<400> 1073

gctatgtaaa ggaacataag tcttacaagc tttccgatgg ttctgtcgtg attccattga 60
acaatatcgc gattggcatt gaaaccgatc ctattgaata agaaaagcat tgtttgtttt 120
gttcgagaaa tggaatgaga aaga 144

<210> 1074

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F3

<400> 1074

agagagagag atattccgcc tatatcggtat tatagatata caatatgagg ccgacgttag 60
ataaactagt gtcaatgggt cgcaagtgtg tatctccgtt aaaagcgttg gtatattcta 120
ctatccatcg tcgactgaga aggagagaat atcgacggga ttggattgct cacatacaag 180
ctgctgctcg tggtcacggt gtacggtagc caagatttgt gtacgtttta tgaaataacc 240

aaattctcct caatcgtgaa atactgagcg aattggcaaa gacagattcg gcgacgagtt 300
ctagttttatt gacatgggtgt gcaagtacaa tcaacgttat cgatttagga aataaagtat 360
aaaacagtga ctagataata gttggactct ttttccaaaa gcccaagggat 410

<210> 1075
<211> 377
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-F4
<400> 1075

cggacgcgtg ggcttggctg ccgaagttgt aagagcacat acggagttgc taatagcaga 60
acttttcggaa cagttgatac aacgagctag tgctaccgat tcttctgtcg gaaacatttt 120
gaaacagtgt caaacgctgt ttcttttaca ttgattgac aaacagtcga ttttcttgcg 180
ttataattgc ttatctcctc caaacgcaca aaagttgcat cgagtactag tcgaactttg 240
tatgcaactt caagagcagg cactgccttt ggtggattct tttggaatag cacctcatct 300
attagctcct attgcctttg attggataga acataacagt cgtagtaa at tgtaagttgt 360
taattcgaac aagaaaa 377

<210> 1076
<211> 414
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-F5
<400> 1076

cccacgcgtc cgatttgggtg tttgggggtct gaaaagggtg tgaaagtatc caagtagaaa 60
caaataggct gggaaaatac tactgagttg acagcaactc tattttatgt ctttttactc 120
cagctctttt ctttcttcgc tagacacggt tgaagagtct agtaggggac tgaagatagc 180
aaggtctgct tcctcgggtc ctttttcgat cgaggaagtg tctggtactg gtaaactact 240
cgtcgggaag cagaagaggg gggaatattt aagccaaagt ctgaagccgg aaatatttag 300
aggagactca acaagaacaa ctggatgctc agatgaggac ttgtttggga agaagccttg 360
ggtgaggccg cctctttcta agatttccat tgtgtcctca tgggaagtaa ctga 414

<210> 1077
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F8

<400> 1077

ggatgtgaat atgtggaaag cacaacaacg agagcgttgg ttttttggga gagagttttc 60
 ggcacaagag gataggctgg aagacgacca aaaagggaat gaggaggaag acgacaagga 120
 cgatggtggt gatgtggact ataaaaactt gcaacgactt gtgaaataaa atcttttttg 180
 ttgtgcacca acatgttttt tgtgtagaat tggatagaaa caagtaggag gatggaagaa 240
 aacgtaatag attttccttg tccaagtac gtagagggtg cactggaagt tttatttcaa 300
 gactttcctg gattagacgt cccgggtttt ccttggttg cgttacagag ccaagtacaa 360
 gccctcgtga aagacaatag caaagtggag cctgaacttc gtcatttaat aacc 414

<210> 1078
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-F9

<400> 1078

cccacgcgtc cggagactta tagcgcttca tgtcagttgc atcttttggt tggcttactg 60
 gtccaactgt cacacatgat aataaggaga ctgtaatac ctggttgca cataccagat 120
 atggcttggg acgagtagtt tcctttcgga atcataatag gggaccttgc gtggaatcga 180
 gacgacccaa aacacaaggc aggctaaata acttgaccat gatgccatt ggtgttccca 240
 aggtagctta ccgtgttcct ggtgctcctc aagcagattg ggtagatatt tacaatcgac 300
 tctatcgga acgtattata ttcttaggac aagagattga cgacgagatt tcagaccaga 360
 tcatagcagt aatgccctat ttagactctg aagattatac caagcctata tatctttata 420
 tcaact 426

<210> 1079
 <211> 380

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-G11
 <400> 1079
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 aaggcttctg gtgacgaatt cggttgagga aaactcgagt acaacagtac aaatgcagga 120
 aaagaaagcc ttggatgaag ctattcattt atgggtggacg aatagtgagt tttcttatta 180
 ggcttgtatt cattctacct ttggtcgcac aagggttcga cagtggatcg tcgcggtgct 240
 gatacgggac tgggttataa ggatttattc tgacaggtcg gttttcagaa ggagtgttgg 300
 gcgttcgcat gtccatcacc gaaaacctaa ctgccttaa ctttgactcc agcaacgtta 360
 ccaccacgag ccgacgccct 380

<210> 1080
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-G12
 <400> 1080
 cccacgcgtc cggagttgaa ttggtgggaa cacgttgatc tagatggcaa gttgagaatt 60
 tttttgacac cagcgcagca ctggagtaga agaacaattt gggacactaa tcaatgttta 120
 tggggaagtt tcgccgtaat tgggtacttct gtaaagtttt attttgctgg agatacgggc 180
 tattgtccag tattcaagac aataggaaga tatttaggtc cttttgactg tgctgctatt 240
 ccaataggtg cctaccatcc aagatggttt atgtcgctc aacacgttga tcccgagcag 300
 gcagttaaga ttcataacga tattgatagt cgtttttcca tcggtgtaca ctgggttaca 360
 tttattttga caaacgaata ctttctcgaa cctcctcaac ttctaaagaa agtcattg 417

<210> 1081
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-G2

<400> 1081

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aaaagaggga gtagatgagg aaagaaagat caaggaagta agagtaagag aaggagtaat 120
gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa agcgcgtagc ttttgcataa 180
tgtcccagcg agtgaaagag gaagcaaaaa gaaagaaaaa gcccagaagc caagataagg 240
tatcaaagta aagaaagaag gaaaaggaga agaagagagg gtaggcttag aagcagcaaa 300
ccagagagga aagcggttaa gcatgaaaga aaagaaatcc gaaaaagaag agaaaaagg 360
aagaaagagg accgaatcag ggtaagagg anaggagcaa gaagagaaga 410

<210> 1082

<211> 214

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-G3

<400> 1082

tgaactatct caaagatggg aaacccccag agctaaagg tggatgaagt ttggtattct 60
ttgcaaacga ctgtaaattg tggaaaagga tgacaaagaa taccctgagt ggttggttgc 120
tctcaagtct cgtcgagcaa cgttggaaga tcttgtagaa agggtaaaca agttatatgc 180
tcaaggagg gtggatgcag ttgcagaaaa tggt 214

<210> 1083

<211> 403

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-G4

<400> 1083

cccacgcgtc cgccacgcg tccgcccag cgtccggcga aacaagagaa gggaagtaaa 60
aggtaagaaa gaggaagggt ttacgagaga aggaagtaga aagaagagag tgtaaggcgg 120
cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 180
aaagccgtac tgaagaccga cacaggtagt cgaggagaaa ggagacccaa attaggtga 240
gagaatggac gataaggaac taggcaaaag gatatggtat ctgcggtaga acatatgaaa 300

gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag 360
tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atg 403

<210> 1084
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-G5

<400> 1084

cccacgcgtc cgtgattttg tcatgtcgtc ttcaaatgag tctatcgaga cgttattgct 60
aaagacgttt cctaaagaaa tccctacttc gtattgtctc gtgtatgcac ttttggctat 120
tccagtactc gcgctcgacg tgtatttata tcttgccgta ctccacttga actttattgc 180
ttcaagcgtt tcgttgatca tccgtactac agtcggcttg gtgcttctag ttacgtcgta 240
tcataaaact gcatatgcca agtgggtctaa gctcgatcgc acaacagagc aaccaaccaa 300
gagctctttc aagggttaatt tgtcggcata ccgaagtgga gttgagagtc acctatggct 360
cctggaaaga tcctcgggtca gttacagtgt aatgataaac aacgcaatat ttcaagcctt 420
cgtattcggt 430

<210> 1085
<211> 344
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-G7

<400> 1085

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ctcaaaagac ttaccaaga ccaggagaga gtggctgtcc tgttactttc aaggctcagt 120
atgagaactt tattggtgga aagtgggtgc cccctgtcaa gggtcagtac tttgacaacg 180
tttccctgt gaatggaaag gtgttctgca aaagtgcgcy ttcaacagct gaagatattg 240
aactagctct ggatgcggct cacgctgcaa aggataagtt tgggtgcaatg acttttgaac 300
aaagggcgaa gttgttgaac agaattggctg atgctattgg acaa 344

<210> 1086

<211> 175
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-G9

 <400> 1086

 cccacgcgtc cgattcgaat tatcattaag acagatgcaa atgttaacgg cgctcatatt 60
 ccaacattgt tacttacctt cttttaacgc tatcagcgtc ctttgatga acatgggtcat 120
 ttatatatag cgtgtcctcc actgttcaag ttttgaacaa ggaaaacttg caaat 175

<210> 1087
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-H1

 <400> 1087

 cccacgcgtc cggtccttgt gtccatctc ccaacttgac gacaatgtgc ttggtgcaac 60
 actatatcga tgaaaacggt atttcctatt acggcttga cgctttttgg aggtgggtac 120
 tagacggttg tccaaaaagg cctagtgaag aggaagtact gcgtcgaagt cgcaagtctg 180
 gtcagtttgg gccacgttcc agtgctgctt ccacacaaca agggagagct ccaagtacag 240
 atatgagcgc ttggaacgcc atggcagagg actactatcc tcgaagaaag aatcagcgag 300
 caacggatcg agtggagatg gtaccgaact tgcagaaacc cgggacggag catcagcaac 360
 cgttggtgaa tcaaggtgac gaaaacggt 389

<210> 1088
 <211> 411
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-H10

 <400> 1088

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 ttggacttgc cgctatttc tctatacagt tgtgttagca ttttcagcaa caataattgg 120
 acttgatgga aggaaggcag ataacatatg gaacgatgcc ctatattatc atggaaaagt 180

ggtgaacttt tgtgcatatt cggttcgtc tgtttttgaa ggtggcgacc atggcgcatg 240
 taaatatgtg atggctttgg cttctatcag cttgatttta gttttctttc tttggttggc 300
 ctctttgtc gacgcattgt atccaattct tacaaaagttc tggtttgtgg agcttggtat 360
 caacatattc cttactatgt ggtggttggg tggtgcaatt gtggtgactg c 411

<210> 1089
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-H2
 <400> 1089

attgaactat tgttgggtgtt ttcaaagttg tctataacaa catgtcagac aaaccagcca 60
 ttgttttggg caacggttca ggaaactgta aatgtggtat agcaggagag gactctccaa 120
 aggcagtatt tccggtatt atagggaaac ccaagcaagc cggagttatg gttggaatgg 180
 ggcaaaagga agaatatgtt ggagacgctg ccatgtctag gagaggcatt ctccacaatca 240
 aatatccaat cgagcatgga attgtaacta actgggacga catggctaaa atttggcatc 300
 atgcctttta caatgaactt cgagtaaacc cagaagagca tccagtgtt ttgacagaag 360
 cccctttgaa tccaaaagca aacagagaac gaatgactca aataatgttc ca 412

<210> 1090
 <211> 247
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-H3
 <400> 1090

gccaagtta cgaagaacta tgaatgaatg ccacgataca agtttcatca gccagagaaa 60
 gtatacaaga atttcgtaaa cttcgccagg gagttggaga actatgcata agaaatagcg 120
 atagtctaac ggtgagtcag ctacgtcac gaaagaagcg cgttcgtttc ggtagatcag 180
 ccatacatgg atgggggtctt tatgccatgc aagatatcga gcctaataag tttatcatcg 240
 aatatgt 247

<210> 1091

<211> 384
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-H4

 <400> 1091

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 aagtaaggta atgtatggag aaaagatgat aggaataatg gaatgtggaa tgatgttaat 120
 gtttagcaatg atagcagtaa taatgatggg ggaaggagaa tagagaaaga aggaggatgt 180
 aagggagcag gagttaagaa gatgggagga agtgataaga agaaatgaat gaggattcaa 240
 gtagagcagg agaactacgc ataaaaaata gccatggtct aacggtgagt catttcaagt 300
 cacgacgaga agcgcgttcc gtttcggtaa atcagccaat aactggatgg gcgtcttaaa 360
 gcaaaacagg ggggcccccc caaa 384

<210> 1092
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-H5

 <400> 1092

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 gactgttttag caaaaccaca gcactctgca taagagagat gatgtaacgt atatagtgtg 180
 cggctctgcca catagtagag aataaatcga tgatagttaa agcgagtagt atatgaagta 240
 tagagaatgg cggtcctaac agtaaggatc caaaggtagc gaattaaata cacgtttgaa 300
 aggcgtccag tatgaaagga gaaacgagtg tatcactgtc tagtcgtcca actcagcgaa 360
 acagcaataa ctggtaaaat gc 382

<210> 1093
 <211> 411
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-H6

<400> 1093

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gatagatgaa gaaacgcgag acctggaaat tttcgtattt acttcctatc aggacgttat 120
ctcttttagag aaagtagtgc ttactgtaga gaagcctcgt gtagtttctg tgcgtgtgaa 180
ccctaacaat cccattttctc tttctagtgt caaaactgca tcgctacaat tgcattttgt 240
ttgtttgaat gacggtacgt agtggacgat atatatatat atacatcggc tttgtgagat 300
tgagttggat gtaggggagt ctcttgtagt gataacttta tcttttctgt accgaccact 360
tgaattttca ttggtgaaga aatgtcgaaa gccacagttg agacgtgccc a 411

<210> 1094

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-020-Q1-E1-H7

<400> 1094

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cacaagagac aaaagatgaa ggcccggaaa caaagccaaa ccgctttgca attactggcc 120
acacagagga ggaaatggat acagagctaa gcaagcttga tgacgagaac aaccggctgc 180
acaagaaaag attacttact tccacggtct ttggtaaccc taaacatttt atatgggtcc 240
ttgcatcgtt tgcgagcatg ggaggaattc tgtatggat tgaccagtct ttgataagtg 300
gtgctggat ttatatgcca gttgacctac acattgacca gaatagagaa gacatggtta 360
ctggatttat gccactccgt ggagtanttg gtgccttaat 400

<210> 1095

<211> 366

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-H8

<400> 1095

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ttcttctcga tcggatgctt gatagtacct ggatagagat gttctcttaa gattcgtggg 120

atctttcaaa caaactcgaa acgaaatcga cggcaaatca aggtatacga aagaacgtag 180
 atagaagaga taaaggatct acatccaata atatttggtg tcgtcgaatt gcttggcaat 240
 ggacaaggtc tacttgtacc gattctcaac ccaaagcttt aaataattga agaaaattgt 300
 aaaatgcgtt ccctttttga acgaagtggg gtacaactga tcttgacatt tgttctctat 360
 aagctc 366

<210> 1096
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-H9

<400> 1096

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 ttggacttga tggaaggaag gcagataaca tatggaacga tgccctatat tatcatggaa 180
 aagtggtgaa cttttgtgca tattcggtt cgtctgtttt tgaagggtggc gaccatggcg 240
 catgtaaata tgtgatggct ttggcttcta tcagcttgat tttagttttc tttctttggt 300
 tggcctcctt tgtcgacgca ttgtatccaa ttcttataaa gttctgggtt gtggagcttg 360
 gtatcaacat attccttact atgtggtggg tggttgggtg aattgtggtg actgcaaagc 420
 gaccttctag tg 432

<210> 1097
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-021-Q1-E1-A10

<400> 1097

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 tgcgtgccaa gtggaaaaag aagagaacac gacgcttgaa gcgcaagaga agaaagatga 120
 gacagcgttc caagtaacgg aagaagcctc ggacgtctga gttgaataga gttcctaaaa 180

cgtgggaaaa ctctttttgc aactctggcg cagtgattat atcctgctac ggaaggttga 240
aagtgtttcc gaggattgtc cgcaagttat gataaaaggt tcttgtgggt tttgttttca 300
acttgtaaat gccacttgtc agtcataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
aaaaaaaaaa aaaaaaaaaa ataaaaaaaa aanaaaanan aaaaaaaaaa aaaaaggggg 420
ggcggcccaa agggttca 438

<210> 1098
<211> 388
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-021-Q1-E1-A12
<400> 1098

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atttgaaaaa ggtctggcg actataggtt gattgctcaa ttcacatgc ttgctatgtc 120
agaaactctt cgatatagac agacaaatgc aattcattgg cagtccttat aggccgtctt 180
ttcagtga 240
accctgggtg tacacgtcct tactctcgt gcctatacat ccacctttca 240
caaattgggt cttttgcaaa tgtgcacaca actggtgtcc tgccccacat ctgaaatgcc 300
ctaattgcca ctagtacca ttctctcaag gcactttatg gctatcagca cctatgttta 360
ctctctgctt ctcacgtc tgtgcaaa 388

<210> 1099
<211> 408
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-021-Q1-E1-A2
<400> 1099

gggagaaatt ccctgagttg cgccatgtcg agtcgttgga gcaaagtgac agcagaagag 60
tgcacttttc ttatatgcca tgttcaagaa agattccgct cagttattta tcagtacccc 120
agtgttatcc atgctgcgaa gatattgttg gaagcagctg aactattcaa gatactgtg 180
atagccacag aacagtatcc ccgtgcttta ggacatacag tggaggaatt ggattgtcaa 240
aagatgaaag tgtatgagaa gactgtgttc agtatgatgg tacctgaagt agagaaaaac 300

ctcttggAAC actcgttgag aagaactgct gttattgtgg gaatagaaac acatgtctgt 360
gtattgcaaa ccactttgga cttgttggaa aagggttatt cagtgcac 408

<210> 1100
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-A3

<400> 1100

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tttcccaacc cggaatcca aatgggccct ttggcccaa catttaacc ataaaaagag 120
ttaactcggg ggtatgccac acctttgaaa acggcagaaa acggggaacc aaattttgat 180
gatttggtaa aaaatgctga aaagatacag gcaagattca ggaaaattaa ccacttaact 240
attcaagaag gtcaaagact tgtaaaacca ggtttgaaag aacttattgc aaatagacac 300
cccagaccgt atataccacc ttttgtctcc ggaggaacag catatcagag aaacgttcct 360
tgtctccag aggatgtgaa cgatctacta ccacctcgg agagacgcat tcggtagaaa 420
ggagccatcc tactt 435

<210> 1101
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-A5

<400> 1101

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ataaaaccaa aaaagatatg ggaggattct ttccggtggt gttttctttt gcggttggtg 120
ctggagttgg tgtgtatgtg gcacaaaact atcgcgttcc gaacgtgcag tgggtggtgc 180
aacaaccac ggatattgtg aggagaatgg aaagacaagc acgcaagtct caagaggaaa 240
aatagtgaat gaagaatgtt ttttttggcg ccttgtggag aagaaacaaa gctattgctg 300
gggaatgaat ccatatccaa ttatttatag atatatatac atatatatgt agcacggtta 360
tttgtggttt ccaattcttt ggaaataaaa atgctgtagt tggaat 406

<210> 1102
 <211> 335
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-A6

 <400> 1102

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aatggaaatt attttatcgg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaata aaaaaaaaaa tacagacaaa  180
aaaaaaaaaca aaacagatat aaataatgaa aatacaataa aaaaaataat aattctaaat  240
aggacaaaat atttaaataa gaatgtactt actgaatcct agcagaaacg aaacatatat  300
atcattaacg aatgaaacaa aaatcaaata tttag                                335
  
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<210> 1103
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-A7

 <400> 1103

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ccttggaacc acatatcgac actatgacta tgaacgtaca tcacaagggc catcaccaaa  120
cttatgtcaa caatttgaat ggtgccatac aaggggaaca tgggggtcag ttcaagggtc  180
tctccatcga aaacatccag aggaatgctg caaaggcacc tgatgctatc aaggcagctg  240
tgagaaataa tggcgggtggt cactacaatc attccttggt ttggacactc atggcaccca  300
caggatctgc aaatagtgca cctcacggtg agttgaaaca agctttggaa gcagagtttg  360
gttctgtgga tgagtttaaa aacaagttca atgcagcagc tgccgg                                406
  
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<210> 1104
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-A8

<400> 1104

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gataagacag agacaagcta cttcatttga ccacgataat ccacaacatg aagaaacgct 120

gttcaagttg tgggatttgt tacttgtttc atctccttca ccctgcagta gaaagagtga 180

ggagtggaaa aaacttgggt tccagggatt ggatccttgt acagacttta gaggaggtgg 240

tttactggca ttgcagcaac ttgtatat tgcagaaacg agaagagagt tggctttaca 300

aatgttgaaa gaagcgagt acagttatcc ttttgcttgt gttggtattc attgtaccgc 360

agctattgtg caacttgtcc atgaagacta tttggatata ttg 403

<210> 1105

<211> 275

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-021-Q1-E1-A9

<400> 1105

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acttgatata taatgtcgtc acgtgagata tagtggtaca cgtttgtatc gtgagcatan 120

acaacaggta attcctaaaa aaaggaaaac tttcaatcat aaaccgaaaa aaaaatttat 180

tcaagttaac tcaaggagaa tatatttcac cggaataacc tgaaacaaca ataatgcctc 240

aaagtgggtg tcttcccaaa aggttccatt tatag 275

<210> 1106

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-B1

<400> 1106

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tcgaaatgtg gggggaaggt atctgggaga gaatccaaaa caggaacaat tactcgaaaa 120

gcctaaagaa gatacaatat cccacaaaaa tttgtacgag ataactcgtt tggggcccaa 180

agatgctctt ccaccgtttt ggtcccttgt ggcaagtagc acgtggaaac tgccacctcc 240

caagtgtcca tatgacaatt atcaacgtcc tgcaatacta gacaaaagac tagaagctct 300
 tcgtgagcgt catgaaagaa agcagtatag ggaactaata caggacttac ctagtcttgc 360
 gccaaagcgaa ccatcaacct ctgcctcttt taagtcattt aggggaacagt tgacacttgg 420
 cttgca 426

<210> 1107
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-B12
 <400> 1107

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 tttgagtttc atgtgaaatt attggagacg tttaacggcg aaaacgaaga tatgttgctg 180
 agcatagagc catatgcagt gaaggcttgt aaggaagcta ttcgacagcc gaaattgttt 240
 cgttttgatg aacttttggg tttggacgcc attcaaaggt tgaagaatac caaagagcac 300
 gcgttgcttt tcgagttgtt acaaatatc gtttctgaca agttggaagc ttttgtggat 360
 tatgtggctc gcaatcgaga gtattttgat cgagcaggtt tcgattatga agcttgtttg 420
 aacaagatgc ga 432

<210> 1108
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-B5
 <400> 1108

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 ctctcacata ccatctttct atcatggccc aactcgatgc attctatcca ttgctgttgt 120
 gtggcttcct agattcacgt gttgaatgga aagagcctgt ttgccattaa agacaacagc 180
 ggaggtgcat tgcccattta ttggttgag atccaagcgt cgtgttctgc caacgtataa 240
 cggatatgcg tccatagcac ctatatatcg cacttgcagc tacaatgtat gcaatgtact 300

gaacaaacgg ggtggattgc agtcgatacct ttgcaggaaa cgacaagagt gaaaagtggg 360
 atttgtcacg tattgtttca ctggtcacta tgtaaaagac 400

<210> 1109
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-B6
 <400> 1109

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 gctcctcgga agagaggaat ccacgaaaga aacgtgctcc tcgaggagaa tttgataggc 180
 aagtagaggc agttcgtaaa gaaatgcaag caatcaaaga gtcactggaa gaaacggaga 240
 ggaaacttca agaggcagag aggccttcgta atttcatggt ctcagagtcc aaagaagaag 300
 aaggtgacgc gcaacagaca ggcacttctt cagaagagtt gaaacggtga ccggttgctag 360
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<210> 1110
 <211> 376
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-B7
 <400> 1110

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 tttcaaaagg ggaccaactc ttagaatctt aagaaatggt attattttgt cggtttttga 120
 tttaagggcg cttgtatttc atgaaaaggt acaaataattt gacccggaaa accttcaatg 180
 ttcccaagtt tcagagcagc ttacaacaag tctgcagtca gtcctcaaagt ctggcagcaa 240
 ttttattttt gaactgtttg tgtagacac gcttctgacc ttggtaagca aacaagctac 300
 cgatcctttt gaaactttat agcgttcgac tcttcaaagt ttcaatagaa cccccagaat 360
 gaatgtggct cagtat 376

<210> 1111
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-B8

 <400> 1111

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 ttctcggcgt ccttgggaac acttgggtgc gatggcactc ggtgcttaca tcggcaaaat 180
 atggggagaa taccaacatg acaagattga aagaaaggag tatcgtatga agagagatct 240
 tgaacgtgca agaagagaaa atcaaattgcg ccttgaacaa gttgcagcag agaacggagc 300
 ttgaggagtt gtgtatgtat gaaaacaagc ctctgaacc aacaacttgt cgtgggtata 360
 ttttatatat tgatatcaat aataaacaca caacttgggt gtactt 406

<210> 1112
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-B9

 <400> 1112

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 ttgacttgct ctcactacaa aagactttct tttgtattgg tccggtttgt ttaagaagtg 120
 gctatggatt aggtttggga attggctgtg ggctgggctt tggtcgtggg tttgctttga 180
 tggacctgct tagtcaaggt gtcggtagca ccggtggtat tcctacgcag ttcttgtatg 240
 gtttgccctt tggacattac gtttctgggt ttttgcagaa cttagcccga aaatttcctg 300
 gaagttcaac aggtattggc tgtggttttg gtttgggcta tgggtgttga attggtctac 360
 agtatggagc aggtggtcgg ctttcttttg gaaatagggg acatttatat aattttgggt 420
 cgactcactt tgaaagac 438

<210> 1113
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C1

<400> 1113

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tttgcgacac tatgtcttga aaaacagttt tccttcaagt gcgagtgact atgatgaaca 180
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aggagaatat gaaagtcttg ttctcaaagg tccctccaag gaacatctgc gtattcgaga 300
ggatgctttg cgaacttttc gtcatgatac tgagtttcaa ttgcgagttc ctgaggataa 360
gttggttcga gtattaagtg cctttgtaca ctggagtga ggaactcctt tttattatcg 420
ag 422

<210> 1114

<211> 453

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C11

<400> 1114

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cgactcagca tgaaagccca ttcccatgcc atcaattagg cgccttggga tccacgggac 180
aattcgatcg ttcgattgga cgtctatttg agatagtcta gaagttgcct agacggaact 240
caggaagttg ttccttaggt agaaaacacg gaaaagccag aaacaaaacg gaagactact 300
tgtatagaat agaaactttt caaagtagaa gtagcgaaag atttaggcaa cgtcaattt 360
gcagagttgt aagaaccttc ttacgctcgt aacttatgct ttacaagacc agattgttta 420
gaaacattct tacgcacaga acgcttggtt ttc 453

<210> 1115

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C12

<400> 1115

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ctgtggaacc aaagttgacg tcctcagga ccaagtggag agtggtagct cagcatatca 180
aggatatttg tggagacctt aatcaaactt ttaacaaaga agaccctcgt tatgaagtgg 240
ttcaggcagg agcgagtgcg gcacacgact ttgacgtcag atatttggac attcacaagc 300
acggaagaga agtttctcga cttttggaga aaatgcaaaa gtatcgtcaa gaaatcgaag 360
aaatcaaaaa agagtacaaa gagtcagaca agtatagaga aagatacgac cactacaaag 420
tgaagctgga caa 433

<210> 1116

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C2

<400> 1116

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tctctttctt cgtggatatt ttacccaaat attgcgaagt aaactttcag atacggaatc 120
gggtctaact actacggaag cagtcgaatt tctattgtgg aactttgaag aagccaatag 180
actgtggatt agaatgcaat atgaagtcaa taaggaacgt ttaagaagaa gcgaggaaag 240
aagacaagta gaaactttgg ttggattgaa tatttccaca attgcacatt taaatgattt 300
gacggtatct ttatattcca gtgtcatatt tcctgccatt tcacaacaaa tttgttcctg 360
tcacgatcca atggcacaag aatatttggc agattgtgtt gttc 404

<210> 1117

<211> 250

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C3

<400> 1117

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 agaaaaagaa agagattttca gaaaggggaag aaaagtcagc tatagagaac aggtgaagga 180
 gaactcaaaa agaggagagc accgaacgat ctaagaagaa actttggggg taacagggtta 240
 atgtggtgtt 250

<210> 1118
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-C5
 <400> 1118

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 agagggacaa ttacattat atcctgtatt tcataaacac agcatttgac tcagtggcat 120
 aatcgtaga agtcgtcgtt gtggatgaca ctattcccga tggaaccttg gacgtggcaa 180
 agaaacttca acaaataattt ggcaccgaaa gagtggtttt ggcgccgct caagtaaaac 240
 tgggtttggg ctctgcagat gttcatggcc ttcagttcgc aaaaggaagc ttataatca 300
 tactggatgc tgatctatca catcatcca aatacatcg acaatttatt tataagcaac 360
 gagaatgcaa ttttgatatc ttgactggga cgaggat 398

<210> 1119
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-C6
 <400> 1119

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 caatatttag gggagatatt ggtggacagt gctatttata aagtcactta tgacataagt 120
 gtttctttac aagatgtgtt gagcaccatc cagcatttga atgtaccgaa ttgtccaca 180
 tcggcaggta ctcgagtatt taccgagagt gaatatatca aagctatagg ctatctccga 240
 ggcaatgtga gccatgctat tcacaaaact ccgcacatca tcgtgcaaac ctattattca 300
 ccgttgaatc catccaacca aaacaatctt ccgcaatgcc cagatatggc tggtttggtc 360

aacaacagca acaaacatag tggaaatcaa acaactgttg gaaca

405

<210> 1120

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C7

<400> 1120

gctcgcagcg tccttgccgg gggttttgta ccacggaaca caaggggacg gaacctttta 60

tgggaaggaa cagatgttgc aaccaaataa cgggcctgga tcggagcgac gcgatacagc 120

ttcacatatg ggttcttctg gatatttttc gagtggagtg ccaacagcag aaggctactg 180

tgaacctatg aggttttcgc aactcacacc ctgcacttgg ccgggattaa aaccccagtt 240

tggcaacgta gcaggagcgc cctctagtct gccaaatact tcaactattc ctctcagtg 300

gtcagccttt cttggtcggg tttcagatga gaatccacct gctgtttctt ttgactcgag 360

tgacccatcg ggaagggata agttaattta cgacctaga 399

<210> 1121

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C8

<400> 1121

cccacgcgtc cgcccacgcg tccgcccacg cgtccggctg tccattttct gggatgtcgt 60

cgcaaccgtt cttagtgtt tgcgacttcc aaaatgatat tatgggtttc gttccccctg 120

agaagaagga agccgtcatt aaaggagctt cgaaactttt gaactttgcc cgtgagaaga 180

agatccctgt agttcatgtg ggagtacgtt ttagaccggg acaccctgaa gtttcgaaac 240

gaaacaagat gttttctctt gtttctcca gaggcccat ctttgtggaa ggtactcctg 300

gaagtgacca cgtagcagag ttgaaaccaa ttgaaggatga attcagtgtt aaaaaagaa 360

gagttggagc acattataat accgatctta caaccattct tagcgg 406

<210> 1122

<211> 414

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D10

<400> 1122

ggtggcaata cattgtgggc gtgttttggg atgaaaagtt gtttgcaaga agaaaatatt 60
 caaccaaaca acgcaacact tggtactacc aatgggtgtc ctcatgaaaa taatatactg 120
 accaaagaga tacgctgggc tatacagacc ataattgcgc tgataacttg ccaatggaat 180
 tcggtacaac aaccagttgt gttgtattgt tgtaatatac aaaatccgca tatttgtttt 240
 acggatggat ttttatgtct atcttgtgtc tatcttgtgt gtagagaaga aagccacgtg 300
 tcggaacact acaagttttc aggtcatagc gtatatttcg atatgagctt tatgaaaata 360
 tattgttgtc gttgcaaagc atatttagcg gatcatttat cttcctatat tatt 414

<210> 1123
 <211> 348
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D5

<400> 1123

gtggatcgca gccatgcgaa accttaccga agaggaactc cacgcagtgt ttgaaaagct 60
 tgcaaaattt attggaaaag atatccagac attggtacaa ggacctttgg aagattgttg 120
 ttttcggtta caaaaggata gagtgtttta tgtaagagaa gctatagctg ctgctgcaac 180
 cagtatagct agagataatt tagcaagttt gggtttatgt gttggaaagt ttacccatag 240
 tggtagattt caagtgcata tcaacttttt accatatttg gcgccgtttg caaagtataa 300
 agtttggtta aagcctcagt ctgaaatgtc atttttgtat ggcaacca 348

<210> 1124
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D7

<400> 1124

cccacgcgtc cgatcaacat ttgaatgcat ttgatcgcca aatgcatcat ttggagagtc 60

gacatgcggt ctgtaggcct catttgcac aatggataat gatacagcac aatcaagaca 120
aagtaattgc ctttgaaaaa ggagatgggt tgctaattgt acttaatttt catccggtga 180
aatccctttt cgactatacc gtgggagtggt tgttgccagg aaaatatggt cttcaattgg 240
attcggacag cctgaatttt gggaggattt gatcccatag aataaaatgt ggagcatttt 300
actcgttcct gtaaaacatc atgattgtcc tcattcactc caactctatt tgcccaatcg 360
ttcctgtcaa g 371

<210> 1125
<211> 411
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-021-Q1-E1-D8
<400> 1125

gaaagaagag agtgtaaggc ggcgtcataa tagaaatccg aaaggagtag aagaaaagag 60
agagaagaaa gaaaagaaga gaaaagccgt actgaagacc gacacaggta ctcgaggaga 120
aaggagaccc aaattaaggt gagagaatgg acgataagga actaggcaaa aggatatggt 180
atctgcggta gaacatatga aagaagcagc accgactgtt tagcaaaaac acagcactct 240
gcagaaaaga gaaaatgtaa agtatagagt gtgcggcctg ccaaatagta gagaagaaat 300
cgatgaaagt gaaagcgagt aaaagatgag gtatagagaa tggcggtcct aactgtaagg 360
atccaaaggt agcgaagtaa atagacgttt gaaaggcgtc cagtatgaaa g 411

<210> 1126
<211> 428
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-021-Q1-E1-E11
<400> 1126

cccacgcgtc cggggagatt gaaagatcat ctcggtggtc catgacattg caacgagcag 60
tgcaacaggt tatcaatcaa aaatgggttaa ctactggcaa aatgactcaa accaatactt 120
ggaaagaata ttgtcagtat gcattacaaa gcggtagtgc attgttgctg gatagctccc 180
tcgactttcc tgaatatagc aaaagtcttt catggctcat gcgtattcgt gttgggtggtt 240

ggagttcctg ctcgaggctc gccagaatcg gtatatattgga tgaacaatgg aagactcgtt 300
 gtccttggtt tttggtcaat gtacctgaaa cattgagtca ttacagcaa aaaacgtccg 360
 ttactctcat gctcaacctc atcgcagctg cacaccaag aaaccaatca attgccaaca 420
 attacagt 428

<210> 1127
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-E12
 <400> 1127

tgcatgttgt ggccaaagct ttccaagttg gctcctaaaa aggaatggca aaaagcctac 60
 tcctatttat tcactttaac tggaatggca aactgtgga atacaaaggt ttactgtgaa 120
 aacagttcta cgagtctaca agaagtagaa agtgactttc gagtaagaaa ggccattcta 180
 cagtcccgag caaaagcctt gtatcaacaa atcaggtgtt tagagtgtgg aaatgggtcaa 240
 actattgaat attctggagc tcctactgca aatgaaatga gacaactaat atgggatttg 300
 ctagtagaag gtcactctga agaagatata aaaggtgtta tcgaagtga atatggccac 360
 aaggtttgga tgactccgcc actcgatata cgctcgtctt tcgattttag ttgaccttc 420
 ttcggagtag ctgtttgtat 440

<210> 1128
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-E3
 <400> 1128

aaagaaaacc tttaagcaat aaaggaaaga aatcccaaaa aggataagaa aaggagaaaa 60
 aaaggaccga atcagggtaa gaggtacagg agcaagaaga gaagagagaa tgctgggtgg 120
 agtagcgaag caagagaagg gaagtaaaag gtaagaaaga ggaaagggtt acgagagaag 180
 gaagtagaaa gaagagagtg taaggcggcg tcataataga aatccgaaag gagtagaaga 240
 aaagagagag aagaaagaaa agaagagaaa agccgtactt aagaccgaca cagggtactcg 300

aggagaaagg agacccaaat taaggtgaga gaatggacga taaggaacta ggcaaaagga 360
tatggatatct gcggtagaac atatgaaa 388

<210> 1129
<211> 400
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-E5

<400> 1129

gagccccaag gtatcttact catttgcaca cgatggaggc aagttttacc agaaacatgc 60
aaagctcgag tcagatattc caacggagtt atacaaaggc tgtgggacag ggtctgtttc 120
caatggtttg ttagatactt tctttacaga acgcgttgct tccccatctg atccaactgt 180
tttaaagaag aaggagtctt gtctcttaag taacgtatca ccacatttta tatgtcgaga 240
ctctgatcag aagagcgtgt attcatgcta cgaacaaagt agtcctgaaa tgagtactag 300
cctagtagct acgagttcca acacgtcgaa agtttcaa attcattcc cttttcaagg 360
gacttcagtg ttacctgcaa cgagtaatct aagtacagct 400

<210> 1130
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-E7

<400> 1130

cccacgcgtc cgaggatatca aagtaaagaa agaaggaaaa ggagaagaag agagggtagg 60
cttagaagca gcaaaccaga gaggaagcgt ttaaagcatg aaagaaaaga aatccgataa 120
cgaagagaaa atggtaagaa agaggaccga atcagggtaa aaggtaaagg agcatgagga 180
gaagagaaaa tgctgggtgg attagcgaaa caggaaaggg gaattaaagg gtaagaaaga 240
ggaaggggttt acgagagagg gatthagaaa gaagagagtg tagggcggtg tcataataga 300
aatccgaagg gtttagaaga agagagagag aagagcgaag agaagacaaa ccccttactg 360
aacaccgaca ggtgtactcg aggaaaaagg agaccaatt t 401

<210> 1131
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-E9

<400> 1131

gttggtggaa gaatgctcgc aaagggatgat gtgtagtcct ttgagcagtt tagctttttc 60
 actttttattg ctggttggtta gttacctgaa ggaaggggga gctctgttac tagaaagtaa 120
 agagtgtgga ctcggaaga taatttcaca tagtggggct gtctttgggc ctaaccccg 180
 cgaatttccg ctttcagaga aacctttggt tctccttacg gcttcaggag agggcataaa 240
 tgaatttcct atttattcca gtcagcaaaa cgaagctctt gtcgccc aaa ggagtacggc 300
 agaaggaatg gaacatggag tgtcagagga gcgtcgtagc ttgcctgtag aaacagcgag 360
 atttggggag tggtaagag cagtgcagaaa gtggaatttg tttggagtaa atgaatttga 420
 aacgcatact agtaaagac 439

<210> 1132
 <211> 467
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F10

<400> 1132

ccaagccttc ggacggatta cctcaggagg atcctaacag aacaaggcaa tccgtttaca 60
 acaacggcag aacgagaaat tgtccgtgac atcaaagaaa agctttgtta tgtcgcatcg 120
 gactttgatg ctgagatgga acgatctaaa acgccaggcg tcatcgataa gacatacgaa 180
 cttcctgatg gacaggtgat tacgggtgggt tcggaaagat tccgctgtcc tgaagtccta 240
 tttcaaccct ctttaattgg catggaatca gaaggcctac acacagttgc ctatcagagc 300
 atcatgaagt gtgacatgga tattcgaaaa gacttgatg gcaatgttgc actttctggc 360
 ggttcgacca tgtttctcgg tattgctgac aggatgcaga cggagctaag cagcgtttca 420
 ccatcgtaaa tgaagataaa gattgttgct ccagcggaac gaaagta 467

<210> 1133
 <211> 447

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F12

<400> 1133

tcggccaaac cttaggggtg gaaggaaaag gcttaccctg ggaaaggaga ctcccctgaa 60
 gactgggcca agccggaaaa atgtcacgcc tgggcaaaac ttgtgggaat tcaaaacggg 120
 tttttgcccc tccgcaataa aaaattccta agccgagggc attgaatttc aacttgaatg 180
 actatatatt acaagtatta ttaaagcgag agtatgtatg gagaaattca cagattgctc 240
 aagttacgac gctgaacaat tgtaaacctg attatatcgt taacctgagt gtcttttcca 300
 tggaaagaaa ggtgacgcaa cggatatcaa aaactttttt ggtgatatgc ttacttgat 360
 gttgagaaga tactcgagaa gaatattgaa atagcaaact tcattgccac aaaatgaatg 420
 caactacgaa cattgatatt gaacagt 447

<210> 1134
 <211> 186
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F2

<400> 1134

ccttttcaaa gcttgaagac tattttattct gtactgtttt agaggtttct tcagaggttt 60
 tttgtactag tctttttcta tgtttcgtag tgggtgaaag gctcctttca caatagcggt 120
 gtcacgaccc gccaatctcc acatcttcaa ctgctacctt gtgcgcgtat atataagtat 180
 acagat 186

<210> 1135
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F4

<400> 1135

ccggcccacc cttcgacgga accttggggg tactgagttg gtgactgcct ctctgtagcg 60
 gaatggaaaa cggcgtacaa ggcaacgttt ttgctcaaac tgctgaagca gtaaacgaga 120

attccattgc tggagacacc aagggtaactt ttgcagtga agtatgggtg gctcaaatgc 180
tgaaggtgg agttatcatg gacgttgtaa ctctgaaca agccaaaatt gcagaggaag 240
caggtgcttg tgcagttatg gcgttggaag agattcctgc cgatattcgc aagtccaatg 300
gaatggcaag aatgtccgac ccaaagataa taaaagccat aaagcaggca gtgtctatcc 360
cggtaatggc caagtgcaca attggacact ttgtagaagc tcaaattctg gaagcaattg 420
gagt 424

<210> 1136
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F6

<400> 1136
gaaagaggaa agggatgaaa tgcagagatc tctagagaaa ggcaagaaag aaaagaaagg 60
aagacacagt aaatgaggcg agaaagcata ggaagtgaag cggattagga acccgtgtag 120
tctatgcagt aaaagaaaga atgagtaaga aaaaaggag tcattccacc aggggagtaa 180
aggcgcaaga aagaaaccca aagcaattga cgggaatcgg aaaaaggggt ggatcacgta 240
aattaatccg atataaacgg agaaccttac ctctccaaga aggtgttgca cggctgtcga 300
aagaacgtgc tgtgaagtga gagaacgtac gagaaagcca agtgaggaaa agaaggcaag 360
tagagggcgg cccgagaaag gagagaaaga ggaaagggat gaaatgcaga g 411

<210> 1137
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F9

<400> 1137
tggatattcg catacgaggg atcgccaatt ccaaaaaaat gttgttgatg gactcgctac 60
aacataccgt ggactggaag gaagagttga atcaagaaca acaaacttgc aatttggata 120
tgtttgcaa gcatatacaa gacacttcaa ttccacatgc ggtgatatgt gactgcacag 180
catcggacgt cgtcaccgag aaatatgcca gttgggtggc tcaaggaatt catctggtga 240

ctgcgaataa gaaagccaat tcgggttcc tggagcggtta ttttcgtctt agagaggcac 300
aacgagcagc caactcgcat tttctttatg aagcaaatgt aggagctggt ctgcctatca 360
tatectctct aagagacttg ataccacag gggataaact g 401

<210> 1138
<211> 318
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G1

<400> 1138
gtttttgaag caaaaggaat gtcgcgtata gtaactgaaa atgaaggtga ctgcaaaatc 60
ttccaaaact ctgtaacaaa aaagctatcc aagattttgt ggttgccac agtttgccggg 120
catcgtgctc gtagaagaac gcagtttgcc attgaactat taggagacac acaacaacat 180
ttcgggaacc atcgagtgt aagagcagta gtttgagaat atcatattga agaatttctt 240
gcaggccttg ctacattgtg tcttggtcca agtcgacgta aagtttgtgt tgtattaaaa 300
gctatgaaat gtttcgac 318

<210> 1139
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G10

<400> 1139
cggatccagt cgaccagcct cgccaagcct agcggacctt gggtttgggg ggccactctc 60
ggctcgtcaa tgtccgtcaa ccgcctttca gattatgcac aaacaaagaa caaagtagtt 120
atatgggtcc cgggtgtata atacatcgag aagaatgaga acatcccgat caactagaaa 180
acacaatagc tcaagcgctc gtagatcttt ccagcgcttc ctccgagccg gaatacaagg 240
acctcgtgtt tgtagatgcc aaagaatttc aagcaacatg agagaacaaa gttgtggtcg 300
tccatattcc gttgagatgg aaccatcaat atcgaaaagt acacggcaag ttggtgcgac 360
agtttgaaaa gaagcttgct gggaggacgg ttgtgttggt agcaagaagg aagatattgc 420
ccaaagcgaa gaaaggagca cgaagagcct c 451

<210> 1140
 <211> 470
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-021-Q1-E1-G11

<400> 1140

 gtcggaattc cagggctcct ctatccaaag tgataggaac gttgttcgaa catggatggg 60
 cacgcagtag atttgcgaaa cctgaagctt atctcgaaaa gtctactgag aagaatattg 120
 gtgcgaatag agtagattca actgtcaaact cttcttcttc tgttgtccca gtgcgacaag 180
 gcgagtttga ttggatggaa ttcttgaaaa catattctga ttttgcagag tctgaagcaa 240
 gtgaatgttt gtatgctttg aagagattct cagagagtga gatggaagta gtcgatacga 300
 gtatgttgat ggagttacat gtcgctgatt cccgcaagcg tgtcaaaatc gtagccgata 360
 tggcacgtta tgctagagag anacgtcaat cttgaattcg ttgttttgtc actttcttgt 420
 acgaagcatc tggtactatt caacatattt aataaaatgt ttggaatgtt 470

<210> 1141
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-G2

<400> 1141

 aaattgttct tcgatggcac tttgtttttg ttttggttcc ttgtcctctt atcaaccact 60
 ttctagtagt gggcgacatt cttctgtttt gaaatcctat tcttggaaaca ctcgatattc 120
 atgtaaatat attccaagac aagcagctgt atttcaaagt aaaacttttg aaaatgagac 180
 tactccagtg aataatacta gtaaggaaca acaacaacaa gaccttgctt cttccaacgg 240
 aaactctcct ccttctactg cggcaagttc agaagaagaa caaacgaggt tggtgactcc 300
 ttctccaaaa agatatggag caactattga tatggatgga aagagcaatg tttgggcagt 360
 agaacctaga gttacagtc aatccgaaga tgaaacgaaa aaagcca 407

<210> 1142

<211> 373
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-G5

 <400> 1142

 gggttgagag attcttatga gaatgacttt ttggaaaaga aaaagaggaa tgccatttcc 60
 atggatttta gtatggatga ccaaattattg gaatggataa aggtttaagt gtctccttca 120
 cctccaaaaa aaataaaaaa aaacaaaaaa aaacaaaaaa aaaaaaaaaa aataaaagaa 180
 agacaaataa caataacaaa aaaacaaaaa aaaaaaatat aaaaaagaaa acacaatcaa 240
 aaaaaaaaag gggggccccc ccaaaggtt caaatctaac atacccttga aacaaatttc 300
 aaacccttc aaaatggcca ccaaaattaa ttacacgggc cttcttttaa aaactcctta 360
 acgggaaaaa cct 373

<210> 1143
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-G7

 <400> 1143

 agcttgTTTT tcacttgTTT gttgttgTTT gatactcaac gacgtaatga gactcactca 60
 ttttctcttt gttttgtctt ttgtagctgt tttcctcgta gctcatgcag ttcccgttgg 120
 agaagatgca ttcagtttca gtcagacttt tggaaatgct tctgcttcag gcaacgcctc 180
 tgttattcca gctacaacca agatccccaa gttagaagta actagtagtg cctcatcaaa 240
 ggacaatgga aaagcagctc aagtagactt tgcagattac tcaaagggat atccttcgcc 300
 tagctatTTT tacgctcctt cttacacatc ctatgtggaa tttcctcaat atccatccta 360
 tccatcatgg ccttctttta atgagcagcc tgcctttggt g 401

<210> 1144
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-021-Q1-E1-G9

<400> 1144

gtacagaaaa tgaccgggaa agtgcagagt acttacttgt gtgagagaca atggaaaact 60

ggagggttct tagttgtcct ttggtttcaa tacatacttg aggttttata ggaagaaaaa 120

acatctattg gaagctactt gttgttttta tttaggcttg gtgaaaagta caacaatttt 180

tttggagttg ctgcgttcgac aattctacgg catttggttt cttcttctcc ttctcctcct 240

ctgcgctatg ccagccttga tcatcaccac gaatgcctgg ttcaaggacg aggtactcaa 300

tgaacttttc aaaagtatgg cagaagcctt acatagaccc gaacacttta ggctcctgtc 360

ggtgtcacta aggatgcaat gatgatattc gggactcaag tgagccttgt gccg 414

<210> 1145

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H10

<400> 1145

ggaggagtcc agacaattgt ctttgttcaa acaaagagtc gattgttttt tgcggacact 60

tgaagacagt tggaattgga taaaagagac gaggggagca catacagaag agaagctttc 120

cgaggagaat tttgtctgca atagtatgaa gcaagtcgtg actgacacaa tagacttgct 180

agaaagagta gagcagagat gcatagaatg ggacaaaaag acagaaaagc tttcaggaga 240

agtgaaacaa gaatatttgt cgtttttggc gccttttgtg tatcagcgct ttctcgtgtg 300

tttgtttact tggaacgctc tgttgattga atgttttcat tccaatttct ttgtagtcga 360

aaccattcga gggtttggtta cactgactgt tggtgcccct gt 402

<210> 1146

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-021-Q1-E1-H11

<400> 1146

gcaatattct gcagaaagaa agcgagaaga atgggaggtt gtcaactgtc cagaagcaga 60

gaaagaggaa atctatgata ttctaaagga atatggcctt actagagctc atgtaaagag 120

tatattggag cattttgaga agaacccaag taaatgggta gactttatga tgaaatttga 180
gctcggtttg gagaaaccgg atgtttcgag accttggaag agtgcgttat ttgtgggcct 240
ttcttatatt attggaggta ttattccgct ggtgccatac tttttcattg aatcctccat 300
tgcggcgcta aaagtcagtg tggattcac ccttttggcg ctttttattt ttggttttgc 360
aaagggcat gtagtagctc ataataagatt ggctctgct atcganacga tggatga 416

<210> 1147
<211> 454
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-021-Q1-E1-H12

<400> 1147

cgcgtccggg aaaaacaaat ggcatatat ccacgtttcg aatttaccag tctcagctaa 60
caatagtttg gtttctaata gctgcacacg ctcttggagt ttctgaacct tgtgcattat 120
ttcttcaagt gttcggactt tggaacgagt tggcactact gctttctctc cattggatac 180
cagttgaaga agcatattca gatgttcatt gagttttttc cgacttcttt ttgttgcaag 240
attatgtttt gctcgtctcg tatctgtgaa ggaagcttgt tgggacaaca tcaacggaaa 300
tggaagaaag aatccgttgg taattcaact gatttttggg tggacgacag cacatttgaa 360
agcagttgct ctgtagtatt tgtctttgag ctagaagaaa acagtgagga aggcagtgat 420
atgattgatc ctgnngaagc tcttcttgat tgga 454

<210> 1148
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H2

<400> 1148

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cgattctgtt tgggttattt tggcgcgcac acgcagtcct tgttgctaga taaagatgac 120
gacctctacc gagcaacaac aagaacaac aacaactcca gacaacactt tgcaaccgca 180

ccataaccac ttgaaacctt gccggaaccg cgcgcatgcc taccgccatc ccaatgcaca 240
tactccattg ggcggtatca cgtgtcacga cgaaaatatt atcaaagcac agaggtcggt 300
aatatttcaa ctggtgaaac aagtagggaa aaacgtgttg atgggcagag acctactcta 360
cgtcacgttt cctattcagt gttgtgaagc ggaatccgag ctccaaagat ttgcgcattc 420
cgcttcgtat gcaaagtttt 440

<210> 1149
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-021-Q1-E1-H6

<400> 1149

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gtggtcttac cggacctcca aaaccaccac ctcacgcagc aatacaagat ggacctcctc 120
ctggtgggta tccaccggtg gatgttcgta gaaacttgcc caaagttggg ccttccggta 180
ctactttgtt gataggcatc ggactgatca ccatctatgg gttttgggga gcgaccaa 240
cagctcaacg tagaagaaga ctgaaccagg aaaagtatca aattcgattg gctattacgc 300
cgtatttaca agccgaacag gaccgtttgg aagtgaaga ggtaagtaaa gtgtgtgggt 360
gagganggca anggacgcat atgagaaata c 391

<210> 1150
<211> 153
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H7

<400> 1150

ggccaagcga cgcaacaagc gacgcgtcca gaatttgcca cagtctggat cagaatcaat 60
cagtacagca tcattgcca cttgtcgata catcagaata caactgtttc cccccgtttt 120
gtgacaatat atctcgttgg tgagccaaca gac 153

<210> 1151
<211> 417

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-H8
 <400> 1151
 gcaaaagaga gaaagagaga atcattaagc ggaggaaaag aaaccaacgg tgaggtccat 60
 tttggagtag tgggtattac atggaatctt gcaagaaaaa cggtccagtt tctgaaaact 120
 tgggtgctgcg agagcataac cgagaagatt caaaggggtat tgccaaaaag gattcagtag 180
 acaaacagga ggatacatat gcatatacag gaaggaaggt agaaagcaag gatcaacatc 240
 aaacagcttc ggagacccaa gtgccttcta tgttttggtc aaattcctcg cagcgctaca 300
 ctctattccc aatacgttac ccggaatat ggaaaatgta caagaagcac gaggcttcat 360
 tttggactgc tgaagaaatc gacctgtcag gcgatttgga agattggaaa aagttga 417

<210> 1152
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-A1
 <400> 1152
 ctttcaacta gtcttcttgt aatttgctgc catgggtctt tccatctcca agttattatc 60
 gcgtttatct ggaaaaaaag aaatgagaat ccttatggta gggcttgatg ccgcgggaaa 120
 aactaccata ttatacaaac tcaagctggg tgaaatcgtc acgacgatcc ctactattgg 180
 attcaacgtg gaaaccgtag aatacataaa tatcagtttt acggtgtggg acgtcgggtg 240
 tcaagacaag atacgacctt tgtggcgcca ctacttccaa aacaccaag gtatcatctt 300
 cgtagtggac agtaacgaca gatagcgttt cccgaaacac gggaggagct tcacaagatg 360
 ttgtcacacg aagaattgag agatgctgtg ttgttagtgt tttgcaacaa ac 412

<210> 1153
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-A10
 <400> 1153

gggaagttat ggcaaaaaca cgtgccagca gcagcggtaa aacgtgtgta gcaagcgtag 60
 agcagaagaa ctgggtgtaa aggtcgagta gtagagtaag tgtaaaaggg aaaggaaagg 120
 agagaaagag gaaagggatg aaatgcagag atctctagag aaaggcaaga aagaaaagaa 180
 aggaagacac agtaaagag gcgagaaagc ataggaagtg aaacggatta ggaacccgtg 240
 tagtctatgc agtaaaagaa agaagagta agaaaaagg gagtcattcc accaggggag 300
 taaaggcgca agaaagaaac ccaaagcaat tgacgggaat cggaaaaagg ggtggatcac 360
 gtaaattaat ccgataaacc gagaacctta actct 395

<210> 1154
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-A12
 <400> 1154

cgtgttcgat tggagagaaa catggaaata gtgaggcaag ctctgaaagt cgatggctat 60
 cctcagattg gcatagatac gttgttctgg gacaaccgcc cgtatttacc cctcctcctt 120
 gtgcttcgaa agatgaaatt aggttacttc gacaaaaaca tttagaatcg ttgaagaacc 180
 ttactccgga ggaacgtcta gagagaagaa agttgcgaaa caagcaaat gcaatattat 240
 ctaggaaaaa aagatacgag aggcttgagc ttctcagaag acgaagagac gaagttaaac 300
 aacgactcca gcaactttct acggaaatgt cagagttgag gaagtatgcc cgtgaacttg 360
 gtgagagaca tgacaagtgt ttctctctat tacgggccat acgtcaacta actgcggggg 420
 tttaat 426

<210> 1155
 <211> 320
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-A3
 <400> 1155

aggccctccg gacaatttaa cattgttttg gcacagtttt ttgggggggt tcaccatgtg 60
 ttttctctcg acaaaactcg accactatct acttcttggt atgtttttaga ggtttttcga 120

aagtgtgtct taggagctgt tgtacatcca gtcatggtgg ttgctgtatg gttccagtga 180
ctacttgaag aggggtttgtc acttttcgcg aattcaccac agcttcaact tgtagatccg 240
cacatctaca tcactatatt aacatataat tgtggtgtaa tagaccgcaa attgagtggg 300
cgagatcgat tggttaaaag 320

<210> 1156
<211> 362
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-022-Q1-E1-A4
<400> 1156

atcaagcgtc cgctcactca tccgcaagtc tgaggtacga cttgaccagt gatcattgtt 60
tcgactgggtg acaaaagtgc aatacgcttc gtcattcttt atcggcttta cgaaaaggag 120
ttgtcatgtt gggaccgcga ggatgggtgaa gtaatccga ttaagatcca gccacacgat 180
gctcaggtga aagtcagtgc acgggtgctga cgtgcaaate gctcgattga cttgggtata 240
tgggcgacat atgaatcgaa tcacgcagta gcagggtccc gccgaagttt ctcccaggat 300
agctgcagtg tactttgagt accagtttta gcgggtcaaa cgaatgatta gagggctcgg 360
gg 362

<210> 1157
<211> 368
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-022-Q1-E1-A5
<400> 1157

gaacttgtgt ggatttcttt gcatctccct cgagatgacg agaatggcat ttgtaacctg 60
cactggcttc actgtaaaaa aaccgaaaca caataatgcg aaacataactt cacacagaac 120
caagattatg gcttccaaca gtatttctgc cttcgatgag cctgatatgc agaaagtgc 180
ctttcatcct tcagaaagct accagaacag aaattttgca caccctttac agaaaacgtg 240
gtcaggagag ttatctacaa gtgggtgcttg ggagcgtccc atatcaacga gttttcttga 300
ggaagtagtg gttcctccgg agtcacaga agctttctca cgtttgcaga gagatttagc 360

tatggaac

368

<210> 1158
<211> 427
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-022-Q1-E1-A6

<400> 1158

ctccaccaat ttggtgccct atttgactgt tttaaaaacg ctcaccacac gattgagaga 60
agttggaatt cagttaattg actacaatat cgttgagatt ttagtagagc ttatgaaagg 120
tgtcgaaatg actgtgaaaa tacttgcggtg taaaatctat gcgaatttaa tgcattttta 180
tctcttgcaa gaagaccaag cttcgaaagt tactgcgggt ctgattatgc cgcttcttca 240
tagaatgtta tcaaagaacg aaagaaatgt ccaattggaa ggctgcaaga tgtaagtga 300
ggttgcttct attggagaaa tctatcagag acaagctttt gactgcaatt tggttcatga 360
cttgatagaa ctgggacgtt acataagtgt cgctgatgta naagctgcca gcattctggt 420
acaagcc 427

<210> 1159
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-022-Q1-E1-A9

<400> 1159

acgacaacaa cagcactata caagtatggt ttactgcact caacggaact tgcaagatag 60
ttatactcac agctgtggga ttctacttgg cgtacagggg cagactgaac aaggaaatgt 120
ccaaaaatat tagtagcatt atttttgaga ttttacttcc ttgtctctta ttttcctcta 180
ttttacgtac tttggtgaat gtgggcttat atgccctgtg gtatattcca cttatggccc 240
tggtatatct ttggatgggt tgggtattgg gtcagttggt atgtaaatgg acaaaaccgc 300
cacctttttt tagaagggca tgtatcgtn cttgtgctct tggaaactcc aatcagttgc 360
cagtattgat tatggatact atgtgcgggt tttacccttc ttttcaaa 408

<210> 1160
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-022-Q1-E1-B1

 <400> 1160

 ccaggcctac ggttgcagaa atagttttca agtatatgat gatgatgttt ctagtcacaa 60
 acattttggt caccgaatag cgatgccttt tgttatgttg gacaacatga aaatgccaaa 120
 agatatggaa tagaagaaga acaaggactc tttattcaat atctttatca acaacgtcct 180
 tgtcgatggg tgatgagaaa tgtggaatat gcgacgtggg ctccctcgcta gtctttcctt 240
 ggctatatct atctacatcg atatcgtagt aattgtgttt cttgtgtgtg ttgtgggttt 300
 ttttttcgcc gataagaaat aggaaaaaag gggattttct tatcgtgtga aaaatgaaaa 360
 tatgggtctta ttttcgtgtc tcctttcctc ctccctccttg ggtgggtcgca accatcgatg 420
 ccaat 425

<210> 1161
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-022-Q1-E1-B11

 <400> 1161

 attttgtatt ggggtgtcct ggaagtggaa agggaacgca atgtgccaa ttggtgacgg 60
 aatttcattt atgccattta tccgctggag acttggttac caaagaaatg cagtctggat 120
 ctcccaatgg acaaatgatt gatcgaatga tcagaaatgg tgaaatagta ccaggtcata 180
 ttactattga gttgctgaag aatgccatgg aagaacaaag cgaaactcgc ggtttcttga 240
 tagatggatt tcccaggaag ttacattaag caggagcttt tgagaagttg gttggtgatt 300
 ttgagtttaa tttgtttttg gattgtcctc 330

<210> 1162
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B2

<400> 1162

gtggaaagta gaggaacttg agcacttttg tggatacgac gatgaacaga agccacctga 60
gccaagttt ctaaaagtca ccgagtcgct ttgttccccg ctttctttta aggaacagtt 120
ggccgtggct attttattgg aggaatatat gatggaacaa ctaaagaact ttcaaaggat 180
ccagtaattc ctttcagacg ttttaaggca ccagagttgt tgtatttaaa aaggggccta 240
gagagtatga ggtataatga ctacgttggg acaacaacaa tttttgctgt ttaagaaatc 300
aaacgttggt tcaagtcaat agtttatgcg gtaaagctga tggagtttgt tccttggtgt 360
ccaggagcaa agagc 375

<210> 1163

<211> 342

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B3

<400> 1163

cccacgcgtc cgatggttta catttacaga agcggaaaga ttgttgacaa aagcacattt 60
tcgacaagcc gtttcacaag ccaaagcaat gtttaacggt tagataactt tgcactggaa 120
gaaaaatact cggttctcca tggaatagga acagtatccg tgcgatatct ttgagtacat 180
ccagtttctg aaatatcttt acaatctcca taaagatatt gtaataaacc aaacggggcca 240
aaagagtatg aagtaaaaag actacgttgg acaaaaaaca atttatgctg ttttaagaaaa 300
tcaaattctg tttcaagtca ataatttatg ccgtaaaact ga 342

<210> 1164

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-022-Q1-E1-B4

<400> 1164

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